4-14-2023

The Impact of Firm Size, Job Embeddedness, and Job Engagement on Turnover in Public Accounting Firms

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A Dissertation Submitted to The Graduate School at the University of Missouri-St. Louis
in partial fulfillment of the requirements for the degree
Doctor of Business Administration with an emphasis in Accounting

May 2023

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Abstract

Retention in public accounting firms has been and continues to be a top concern in the accounting profession. The direct and indirect cost of turnover; the decrease in accounting enrollment and graduation; the Great Resignation; and changes to work environments due to the pandemic elevates what was already a serious problem into a critical problem for the accounting profession. The size of public accounting firms is a well-used descriptor when employees talk about where they work. The purpose of this study was to examine the role of size of firm in predicting an employee's level of job embeddedness and job engagement and the role of job embeddedness and job engagement in predicting an employee's intention to stay. Many of the elements of a work environment that can increase an employee's sense of embeddedness and engagement can be changed or altered by firm management. A quantitative survey design was used to gather evidence from full-time accounting professionals working in public accounting firms across the United States. Results suggest that there is a relationship between the size of the firm and job embeddedness and that job embeddedness does significantly predict an employee's intent to stay with their public accounting firm. Firm management can take direct steps to increase how embedded their employees feel, with their firm and with their community, and in doing so, can address turnover intentions of their employees. This study illustrates the importance of job embeddedness and its impact on turnover intentions within the public accounting firm context.

Keywords: size of firm, job embeddedness, job engagement, turnover intentions, job embeddedness scale, Utrect work engagement scale (UWES).

Acknowledgements

None of this would have been possible had it not been for Matt, Oskar, and Clara. From the moment I first started talking about this, Matt, you said “we will make it work”. We knew it would be a big lift but you were always there, asking what you could do to help. You took on so many additional roles so that I could travel to class, get up super early for Zoom class, read, write, and finish! And when there something I could “check off”, you were there to celebrate all my little accomplishments along the way. A lot has happened in our world since I started in the fall of 2019 but you never stopped supporting and believing in me. Oskar and Clara, how often you asked “how’s your dissertation going?”, without really knowing how much that simple question meant so much to me. You heard “I can’t right now” or “maybe another time” more than I wanted you to but you always smiled and understood. The 3 of you are my rock.

A big thank you to Dr. Tom Kozloski, my chair. Talk about sight unseen! We had never met before you were assigned as my chair. I am so grateful you were willing to give me a chance without knowing what you were agreeing to! You were willing to work with the crazy time zone math, with me living 3 hours behind you. While I always wanted to be in person for our community meetings, your graciousness in letting us do it over Zoom sometimes made a huge difference. You always knew what to say to give me the confidence I needed to keep moving forward.

To Dr. Jen Chen, thank you for also agreeing, sight unseen, to serving on my committee. I very much appreciated the questions and comments you had for me and my research, especially on how to set up my model and my analysis. They made me think in different ways that led to me to this moment. To Dr. Michele Meckfessel, thank you for serving on my committee and bringing your great sense of humor. I remember in our first meeting, when I was set on doing a qualitative study, you asked me if I had thought about doing a quantitative study (which was terrifying to me) then encouraged me to do so. I am so grateful I went that route and have that experience. I always enjoyed our community meetings because I knew you both would ask excellent, challenging questions while also being incredibly encouraging and supportive.

To my parents, Mike and Kay Kellum, who were always my biggest cheerleaders. I know this would have made you so proud. Dad, we would have had the best conversations about my research! Mom, you were with me as I finished all my classwork and as I started on my dissertation. I am so grateful that I had you to encourage me to take a deep breath and keep my head up and to remind me that I always got things done and I would get this done as well! To Michael and Kat, the best brother and sister a person could ask for. Your phone calls and texts to check on me and encourage me got me through! Knowing that I had you in my corner (with Jami, John, Connor, Parker, and Louis) was a constant source of support. To my in-laws, I won in that category…thank for always believing in me and loving me!

A big thank you to my family at the College of Business and Security Management. You listened, you took tasks off my plate, and you gave me the time to pursue this degree! Thank you to my other family members and friends who have supported me throughout this process, with encouraging words, prayers and positive vibes, and much needed breaks. I hope you all know how much you mean to me.

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Chapter 1: Introduction

Every two years, the American Institute of CPAs (AICPA) conducts a national survey open to all public accounting firms in the United States and Canada. Survey results are used by firms of all sizes as a benchmarking tool to see how they align and compare with firms of similar size practices. In the 2021 AICPA's Private Companies Practice Section[1] (PCPS) survey, retaining qualified Certified Public Accountants (CPAs) was one of the top ten current concerns for all firms with more than two people. Additionally, for those firms with more than two people, recruiting and retention was listed as the top issue that will have the most impact on their practice in the next five years. However, retention is not an issue unique to public accounting firms.

In 2021, PwC interviewed 752 executives and 1,007 employees as part of its US Pulse Survey: Next in Work. They found 65% of the employees are looking for other employment and 88% of the executives are seeing higher than normal turnover. Of the executives interviewed, 140 were in the Financial Services sector. Eighty-three percent of the Financial Services executives stated that their firms were experiencing more employee retention issues than before the pandemic. The reason most cited by the executives, who see their employees leaving, is better wages/salaries at other firms. The second most cited reason employees are looking elsewhere, at 21%, is the lack of fulfilling work or non-alignment with values and passions. Other reasons include better flexibility, better career advancement and the brand/reputation of competitors (PwC, 2021).

[1] Section of the AICPA that supports CPA firms of all sizes in running a CPA practice.

The Great Resignation and COVID-19 Impacts

Retention is a key strategy for organizations as turnover is costly in all industries. Replacing workers costs one and a half to 2 times an employee's annual salary (Gandhi & Robinson, 2021). Understanding why employees leave and what strategies can be implemented to retain them has been the focus of both organizations and academics. However, this effort has become increasingly important following the pandemic. In July 2021, 4 million Americans quit their jobs (Bureau of Labor Statistics, 2021). This is in addition to the 11.5 million that quit during the months of April, May, and June (Kane, 2021). This trend, named the "Great Resignation" does not appear to be disappearing. Gallup found that 48% of the workforce were actively looking for other employment (Gandhi & Robinson, 2021). The majority of employees actively looking for other jobs had either quit, were not engaged, or were actively disengaged from their jobs. The three most common reasons employees feel disengaged are lack of development opportunities; lack of connection to the company's purpose; and lack of solid work relationships (Gallup, 2021). According to Gallup, one significant cost to an organization resulting from non-engaged or actively disengaged employees comes in the form of lost productivity, equal to 18% of their annual salary (Gandhi & Robinson, 2021).

Factors propelling the Great Resignation include stress, burnout, dissatisfaction, lack of work – life balance, feelings of being undervalued, and specific to the pandemic, personal safety upon returning to an on-site office (Kane, 2021). All of these factors relate to an organization's work environment. Now, more than before the pandemic, managers also have to consider the physical location of their employees – are they still working remotely or are they physically in the office? Organizations are deciding what type of mode works best for their customers and for their employees. Some organizations will allow for both remote and on-site workers, which creates a work environment with opportunities and challenges with which many organizations are unfamiliar. Gallup found that 80% of workers in financial services/insurance/real estate/consulting were still working remotely between October 2020 to April 2021 (Saad & Jones, 2021). Forty-one percent of this group of employees want to continue to work remotely.

In a 2021 Gallup poll of American and Canadian employees, 34% of the employees indicated they were engaged at work; the remaining employees were either not engaged or actively disengaged. (State of the Global Workplace: 2021 Report, 2021). Through its work with its clients and engagement studies, Gallup has shown that employee engagement correlates with a number of positive performance indicators, including profits, productivity and retention. Employee engagement and a thriving state of well-being are antecedents of organizational success. Employee engagement is focused on what occurs at work and the concept of well-being includes all experiences, at work and outside work. Five elements make up an employee's overall well-being: career, community, physical health, social, and financial. When an employee is both engaged and thriving in all 5 elements, Gallup finds the risk of burnout decreases. Burnout is the antithesis of engagement (Maslach & Leiter, 1997). Junior accountants with high levels of job tensions experience higher degrees of burnout and had lower job satisfaction and organizational commitment (Chong & Monroe, 2012). The Great Resignation has increased pressure on managers to find strategies and human resource practices that reduce burnout and disengagement and increase embeddedness and engagement.

Work environments have undergone and continue to experience dramatic shifts due to the pandemic. Companies are searching for ways to bring employees back to the office safely while also balancing the individual employee's needs. What was the once the norm – working in the office five days a week – is currently more the exception as people have become used to what was once the exception – working from home. Foosball tables and gyms at the office do not have the same appeal they did in January 2020. Employees are looking at their jobs more holistically (Jones, 2021). With the Great Resignation, retention is even more crucial and finding ways to keep employees is a critical concern. In a MoreySmith survey, the biggest perk a company can offer employees is a safe environment where employees feel they can have either peace or a sense of energy and belonging (Jones, 2021). According to Brian Elliott, VP of Slack, employees want to feel they are working for a company they care about, where they belong, and where they are able to make a difference (Jones, 2021).

This desire ties into the constructs of job embeddedness and job engagement, two constructs that focus on retention strategies (Robinson et al., 2014), not turnover intentions. Employees feel embedded in their jobs when they perceive a fit of their personal goals and values with those of their organization. Engaged employees believe their tasks have meaning, feel safe psychologically to be themselves at work, and approach their jobs with vigor and dedication. As surveys such as the PWC Pulse Survey and Gallup State of the Global Workplace highlight, employees want to be embedded and engaged in their jobs. In theory, managers have the ability to create an environment that allows employees to find links, fit, and meaning. This study will add to the literature streams of organization size, job embeddedness, and job engagement by analyzing how firm size impacts the extent to which managers have the autonomy and flexibility to create and adjust policies, strategies, and practices that promote and strengthen their employees' level of embeddedness and engagement. Additionally, by using these two specific constructs to analyze turnover intentions, this study will focus on why employees stay with their public accounting firm, not why they leave their public accounting firm. High levels of job embeddedness and job engagement should indicate higher levels of employee retention, whereas low levels of job embeddedness and job engagement could be symptomatic of employee turnover intentions.

Public Accounting Firm Culture and Environment

The accounting profession is broadly split into two groups: public accounting and industry/government accounting. Public accounting consists of firms owned by Certified Public Accountants (CPAs) who provide a variety of services to the public, including assurance, consulting, and tax services. Public accountants at firms serve multiple clients. Industry and government accounting include all other accounting jobs, such as CFO, controller, tax auditor, or accounts payable clerk. Accountants working in industry or government work for a specific company or agency. A common path for many accounting graduates is to enter public accounting then move into industry or government accounting.

A CPA license is issued and monitored by state boards of public accountancy. The basic requirements for licensure are the three "E"s: education, exam, and experience. States often have different specific requirements for the education and experience components. Historically, the experience requirement was met by working for two years at a CPA firm. That requirement has evolved to encompass different types and lengths of experience, yet the “2 year” requirement remains the most common for CPA licensure. A very common path for many accounting graduates is to enter public accounting from college or graduate school, pass the CPA exam, fulfill their work experience requirement, and obtain CPA license, and then start the search for employment options in industry. Better pay and work-life balance are the common reasons for moving from public accounting to industry. For the accounting firms, not only is the actual cost of recruiting and hiring new staff high, but the knowledge and expertise lost from CPAs leaving public accounting is significant. Typically, accountants serve the same clients year after year and become well-versed in those clients’ business operations and the services provided to those clients. If the accountant working on a particular client leaves, it takes several years for a new or recent hire to obtain that same level of knowledge and understanding of public accounting and of the client and its operations. Public accounting firms not only have to train new staff on firm software, processes and procedures but also on each client’s business operations, and possible industry regulations specific to the client. They must also help the staff accountant build a relationship with the client.

Popular accounting mass media outlets routinely categorize the size of public accounting firms by annual revenues. In the public accounting world, CPAs tend to categorize firms as “Big 4” international firms, national firms (a slightly misleading name as they also may have international offices), regional firms and local firms. The AICPA breaks firms into categories based on number of CPAs/professionals: small (2-10 employees), medium (11-20 employees), and large (21+ employees) (AICPA, 2021). Big 4 firms have offices across the world that vary in size depending on location. For each country in which there is a Big 4 office, there is a national headquarters office that sets firm policies that apply to all offices in that nation and shapes the overall firm culture. Regarding firm and office size, a Big 4 office in one city may only have 10-20 CPAs and could be smaller than a local firm in that same city. Despite the range in size of Big 4 offices, the offices are still tied to the national office for policy decisions. While a small Big 4 office may have a local office "feel" and an office culture somewhat unique to that location, its daily practices, including employee human resource policies, are dictated by the national office without much room for divergence. The local firm, however, can set its own policies, strategies, and procedures. It has a greater degree of flexibility in changing those policies as it deems necessary and can be more innovative in meeting both client and employee needs. A regional firm, with offices across a geographic area of various sizes, falls between the local firm and the Big 4 firm in terms of flexibility. It has greater autonomy and flexibility than a Big 4 firm but cannot enact policy changes or change direction as quickly as a local firm. The degree of freedom a firm has in adapting its policies to changes in the market for employees and the speed with which it can make the change could prove to be key in a firm's ability to retain talent. A smaller firm who sees an employee's specific need has greater flexibility and opportunity to respond faster and could employ measures that would prevent the employee from leaving.

A 2020 survey found the average staff turnover rate in public accounting firms was 13.7% (INSIDE Public Accounting, 2020). In addition to the direct monetary costs of turnover, turnover in public accounting firms may impact the quality of the profession's principal services to clients – attest/assurance and tax services. The Public Company Accounting Oversight Board (PCAOB) released a list in 2015 of proposed audit quality indicators, highlighting three main areas of concern for audit quality, with the hope that financial statement users could use the list to help assess the quality of audits (PCAOB, 2015). In addition to the monetary and non-monetary losses related to turnover, the PCAOB indicated that high turnover is a factor that "may adversely affect audit quality" (PCAOB, 2015, p. A-8). The first grouping of indicators in the report, "Audit Professionals", focuses on the staffing and experience level on the audit, underlining the primary importance of retention on audit quality and secondarily, on public accounting firms. The Center for Audit Quality provides a framework, the *Audit Quality Disclosure Framework*, that lists six elements of audit quality (Center of Audit Quality, 2019). The framework was designed for use by public accounting firms in assessing and disclosing reports on the quality of the audits provided by their firm. Element 4, "Engagement and Team Management", specifically discusses the negative impact of turnover on audit quality and the importance of recruiting and retention by CPA firms (Center of Audit Quality, 2019).

To address the key issues of recruiting and retaining talent, the AICPA made the enhancement of the pipeline of accounting graduates entering the accounting profession a major initiative of the Institute in the early 2000s (https://www.startheregoplaces.com/; https://www.thiswaytocpa.com/). In 2022, the AICPA, in recognition that the pandemic accelerated and exacerbated the challenges the pipeline already faces, designated the pipeline as one of its primary strategic initiatives (AICPA, 2022). As with any pipeline of professional employees, there are multiple issues relating to the enhancement of the pipeline and the AICPA has focused on several of these issues to build and strengthen the accounting graduate pipeline. As part of this initiative, it has created programs aimed at different chronological points in the pipeline: high school, university, and newly minted

CPAs. For example, the AICPA recognized that students start to think about degree choices before graduating from high school so one of the programs it created is "Start Here, Go Places" (https://www.startheregoplaces.com/). This program is designed specifically for high school teachers and high school students. Additionally, to gain insight into the trends in accounting enrollments and graduates at the university level, the AICPA prepares a biennial report, *Trends in the Supply of Accounting Graduates and the Demand for Public Accounting Recruits* (AICPA, 2022). The report is based on results from a survey sent to universities and public accounting firms in the United States. The 2022 trends report showed that in the 2019-2020 academic year, undergraduate accounting enrollments decreased by 2.8%, in addition to the 4% decrease in the 2017-2018 academic year. Master's enrollments decreased by 8%, in addition to the 6% decrease from 2017-2018 academic year. Since this survey was conducted prior to the COVID-19 outbreak, these numbers do not include the impact of the pandemic on higher education enrollments. The National Student Clearinghouse Research Center found that spring 2021 undergraduate enrollment is down 5.9% compared to enrollments in March 2020 (National Student Clearinghouse Research Center, 2021). Together, the overall decrease in accounting enrollment and graduation and the impact of COVID-19 puts increased pressure on the pipeline into public accounting firms.

In addition to the decrease in enrollments and accounting graduate numbers, there are additional pressures on the public accounting firm portion of the pipeline: the work-life balance of CPAs in public accounting, the growth of advisory services at firms that do not require CPA licensure, the difficulty level of the CPA exam (2020 pass rate was 58% (AICPA, 2022)), the work environment at the firm, and the wave of Baby Boomers retiring. According to the AICPA in 2015, 75% of its membership would be eligible to retire by 2020 (Gonzalez, 2020). With fewer accounting graduates, fewer of those graduates sitting for the CPA exam, and the partners nearing retirement, retaining talent in public accounting firms has become even more critical.

All of these influences and factors – the cost of turnover, both monetary and non-monetary; the potential negative impact of turnover on audit quality; the decrease in accounting enrollment and graduation; the Great Resignation; and changes to work environments due to the pandemic – elevates what was already a serious problem into a critical problem for the accounting profession. This study seeks to explore the issue of turnover intentions in public accounting firms within the context of the size of the accounting firm. The size of a firm may play a role in the autonomy and flexibility partners have on managing the human resource policies, strategies, and procedures. I will survey employees of public accounting firms of all sizes to investigate the impact the size of the firm has on the managers' autonomy and flexibility in changing human resource policies and practices as needed to increase job embeddedness and job engagement, to decrease turnover intentions, and increase retention. Using job embeddedness and job engagement as a lens of analysis, instead of other constructs such as organizational commitment, job satisfaction, and perceived job alternatives, shifts the focus of this study on why employees want to stay with their public accounting firms and factors that could increase this desire, as opposed to why employees want to leave.

Research Questions

To help public accounting firms retain the employees the pipeline delivers, I address the following questions:

- How does the size of a public accounting firm impact their employees' levels of job embeddedness and job engagement?
- Do increased levels of job embeddedness and job engagement influence a public accounting firm's employees' turnover intentions?

This study will evaluate the impact of size of public accounting firm (small, medium, and large) on turnover intentions through the job embeddedness and job engagement constructs. This research is needed to begin to move the issue of retention out of the top ten most critical issues facing public accounting firms, especially in light of Covid-19 impacts and the Great Resignation. The goal of the research is to understand the impact size of firm has on an employee's level of job embeddedness and job engagement in the public accounting firm context. This may allow for the development of best practices for public accounting firms of different sizes in developing strategies specifically designed to increase job embeddedness and job engagement, thus increasing employee retention.

The size of a public accounting firm likely impacts the type of policies, strategies, and procedures that can be developed or changed to create a work environment and culture specifically for its employees' needs. The level of flexibility that partners of the firm have in implementing those strategies to intervene and change/alter that culture and environment, and the speed at which those changes can be made, would seem to be essential in addressing turnover. In today's post-pandemic world, partners are now facing novel work arrangement decisions that require an understanding of employees' personal needs and professional requirements. Discussions about possible remote work that were previously between partners and high performing employees are now occurring with all employees, who have personal issues and demands that were not as prevalent in a pre-pandemic world.

Mitchell et al. (2001) describe job embeddedness as the many ties an employee has with his or her organization and community. The more "stuck" an employee is, both within the organization and the community, the harder it is to leave the organization. Job engagement, originally defined by Kahn (1990), is giving everything one has to the job. Many of the factors that influence job embeddedness and job engagement can be managed by firm owners/partners/managers. However, the size of the firm may impact the autonomy and flexibility managers/partners have in managing these factors. I will use a survey to investigate these research questions.

Purpose of the Study

Therefore, the objective of this study is three-fold. One is to add to the body of literature related to job embeddedness, job engagement, and firm size by focusing on a specific profession, the public accounting profession. The second is to connect the three distinct literature streams and their impact on turnover intention and retention in public accounting within the context of the different firm sizes. The third objective is to develop a list of best practices for firm owners/managers for the different sizes that can be used to create work/cultural environments that can increase retention, focusing specifically on the aspects unique to the respective size category.

Chapter 2: Theoretical Base and Hypotheses

Literature Review

The goal of this study is to examine, using a survey methodology, how the size of public accounting firms influences employees' turnover intentions and retention, and to investigate different strategies that partners can use to reduce turnover intentions and increase retention. Understanding why people voluntarily leave their jobs has been a widely researched issue and employees' turnover intentions have been researched exhaustively as well. Retention continues to be one of the top ten critical issues for public accounting firms, yet research on the impact of firm size on turnover intentions and retention strategies in accounting firms has not been explored. This study will be the first to study the impact of the size of public accounting firms on turnover intentions through the constructs of job embeddedness and job engagement. Because these constructs focus on the links, fit, vigor, and dedication employees have to their jobs, the use of these two constructs switches the focus of the research to why employees stay at their firm, not why they leave their firm.

This section provides a review of both the seminal and current research on turnover intentions, size of firm, job embeddedness and job engagement. Some sources include specific research on retention in the accounting profession that provide both context and gaps in literature specifically for this study. Other sources provide the foundation of the two constructs that create a framework for my investigation of retention in public accounting.

In a meta-analysis conducted by Rubenstein et al. (2018), they found 57 predictors of voluntary turnover across 1,800 effect sizes. They divided the predictors into nine categories: (i) individual attributes, (ii) aspects of the job, (iii) traditional job attributes, (iv) newer personal conditions, (v) organizational context, (vi) person-context interface, (vii) external job market, (viii) attitudinal withdrawal, and (ix) employee behavior. As Rubenstein et al. (2018) highlight, there are many predictors that have been studied to explain why people leave their jobs. Job engagement was listed in the traditional job attribute predictors category and job embeddedness was a predictor in the person-context interface category. The impact that job embeddedness and Job engagement have on an employee's desire to stay at a public accounting firm has not been studied.

Job embeddedness and job engagement are two of many predictors of turnover intentions, as noted above in the Rubenstein et al. study in 2018. Of the many predictors that could be used to look at turnover intentions of public accounting firm employees, job embeddedness and job engagement were chosen as the focal constructs of this study for the following four reasons. First, the job embeddedness and job engagement constructs are thought of as retention constructs as they examine why individuals stay with their organization. By shifting the analysis to motivating factors to stay, I can study what flexibility and autonomy managers have in creating and adjusting human resource policies, strategies, and procedures that influence an individual's motivating factors. This approach allows for a study where firm size, one of the principal characteristics used to describe any particular public accounting firm, plays a role on managers' autonomy and flexibility in creating or altering the firm's work environment to reinforce these motivating factors. Firms that understand their employees' needs and motivations, for example their career aspirations and the type of work they enjoy, and can intervene to work with their individual employees to create an environment in which they have strong relationships, within the firm and in the community, and find meaning in their job, are in a stronger position to retain their employees. Second, this study will add to the body of literature that demonstrates that while job embeddedness and job engagement are similar, they are in fact separate constructs. Third, it will link the job embeddedness and job engagement literature with the size of organization literature within the public accounting profession. Finally, this research answers the call to examine job embeddedness in context of the accounting profession (Nouri & Parker, 2020); to examine job engagement in specific industries and occupations (Bakker & Albrecht, 2018); and to examine other moderators of job embeddedness, such as occupational types (Jiang et al., 2012).

Turnover Intentions

March and Simon's (1958) work on voluntary turnover added the concepts of perceived ease of leaving (job alternatives) and perceived desirability of leaving (job satisfaction) to the then developing turnover literature. Turnover intention was defined by Tett and Meyer (1993) as an employee's "conscious and deliberate willfulness to leave the organization" (p. 262). Since March and Simon's seminal work on turnover, much research has been conducted to understand why people leave an organization. Most of the models used in prior research examined an employee's intention to quit through the constructs of organizational commitment and job satisfaction (Felps & et al., 2009; Pasework & Viator, 2006; Price, 1977; Price & Mueller, 1986). Organizational commitment is the attachment employees have with their organization (Mathieu & Zajac, 1990). Job satisfaction, defined by Locke (1976), is the "pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences (p. 1300)."

Numerous studies have shown that organizational commitment and job satisfaction are negatively related to turnover intentions (Azeez et al., 2016; Boyer-Davis, 2019; Lee et al., 2004; Lee & Jeong, 2017; Mathieu & Zajac, 1990; Meyer & Herscovitch, 2001; Parker & Kohlmeyer, 2005; Stallworth, 2003).

In a call to expand the research on employee turnover beyond organizational commitment and job satisfaction, Felps et al. (2009) investigated turnover contagion as a predictor of voluntary turnover and found that coworkers' aggregated job embeddedness was a predictor of voluntary turnover. Rubenstein et al. (2018) found that employees are more influenced, with regards to turnover decisions, by how immersed they are in the organization, rather than the size or type of organization. Additionally, within the concept of person-context interface, employees are looking for an environment that aligns with their "demography, personality, and values" (Rubenstein et al., 2018, p. 39). Job embeddedness and job engagement are relatively new constructs as predictors of voluntary turnover behavior. This study extends the popular "employees quit bosses (i.e., work environments), not jobs" saying to include multiple factors of the work environment that drive employees to quit. If that saying is true, then an analysis of the role of work environment and its relationship with job embeddedness and job engagement will provide managers in public accounting firms with ideas and strategies on how to establish a work environment that is conducive to increased job embeddedness and job engagement, and thereby decrease turnover intentions.

Turnover Intentions in Accounting

Based on the seriousness of the issue of turnover in the accounting profession, academic research and popular press articles on this topic are numerous. Organizational commitment, the attachment individuals form with their organization, has been the most widely used theoretical framework applied in predicting voluntary turnover in the accounting profession (Herda & Lavelle, 2012; Ketchand & Strawser, 2001; Nouri & Parker, 2020; Parker & Kohlmeyer, 2005; Pasework & Strawser, 1996). Organizational commitment has three dimensions: affective commitment, normative commitment, and continuance commitment (Allen & Meyer, 1990). Affective commitment is an employee’s desire to stay, normative commitment is a sense of obligation to stay, and continuance commitment is a need to stay. Ketchand and Strawser (2001) identified organizational commitment antecedents and categorized them as personal characteristics, role states, job characteristics/work experiences, group/leader relations, organizational characteristics, and costs of departures. The correlates of organizational commitment include satisfaction, involvement, and professional commitment (commitment to one’s profession above and beyond the organization for which they work) and the consequences of organizational commitment are performance, turnover behavior, and withdrawal behavior, which includes turnover intentions. Affective commitment has been the dimension most studied in predicting turnover intentions within the accounting profession context (Ketchand & Strawser, 2001). Few studies have focused on the continuance and normative commitment dimensions in the accounting profession and even fewer have focused on these two commitment dimensions in the context of the public accounting firm. In a study that examined public accountants’ commitment to their profession (not to their organization) Smith and Hall (2008) found that neither normative professional commitment nor continuance professional commitment correlated with professional turnover intentions. Stallworth (2003) evaluated the influence mentoring relationships in public accounting firms have on the three dimensions of organizational commitment but found normative commitment was not a significant predictor of turnover intentions.

Professional commitment is the attachment individuals have to their profession, rather than to their organization. Hall et al. (2005) reviewed prior literature on the dimension of affective professional commitment (APC), its antecedents, correlates, and consequences. One of the antecedents of APC studied by Hall et al. (2005) is work environment but the authors found little theory had been developed to explain the relationship between APC and different work environments. The work environments that had been studied were public accounting versus industry (Aranya et al., 1982; Aranya and Ferris, 1984; Bline et al., 1991; Jeffrey et al., 1996). Research on the work environments of public accounting firms of different size firms does not appear to have been analyzed within the context of APC. Hall et al. (2005) specifically called for additional research on how different types of flexible work arrangements may influence an individual's level of professional affective commitment. Managers determine and set an employee's work arrangement. If employees feel the managers understand their individual needs and are willing to work with them in creating a work arrangement that is beneficial to both the employee and the firm, employees may experience higher levels of embeddedness and engagement with the firm. The size of firm may affect a manager's ability to change the work arrangements. For example, employees in large public accounting firms are hired into a specific service line, i.e., tax, auditing, and consulting. If they want to try another service line, it requires a discussion at the manager and partner level of the firm to make that switch. Employees in small accounting firms often work across service lines, depending on what the client needs. The switch between different types of projects is a simpler process in a small accounting firm. This study will answer part of the call by Hall et al. (2005) by looking at the relationships between size of firm, job embeddedness, job engagement, and turnover intentions. In doing so, this study will add to the literature on the antecedents of turnover intentions within the public accounting firm context.

Accountants' job satisfaction as an antecedent to turnover intentions has been another area widely studied. Harrell and Stahl (1984) used McClelland's (1961, 1965) "trichotomy of needs" theory to analyze why some employees have higher levels of job satisfaction in large public accounting firms while their colleagues in the same firm have low levels of job satisfaction. Higher levels of decision-making authority result in higher levels of job satisfaction and lower levels of turnover intentions in accountants (Dole & Schroeder, 2001). Technostress, a relatively new form of stress created by interaction with information and communication technologies (Brod, 1984), combined with organizational commitment and job satisfaction, significantly predict turnover intentions in public accounting (Boyer-Davis, 2019). Staff accountants who have higher levels of job insecurity have lower organizational commitment and job satisfaction, which were negatively related to turnover intentions (Pasewark & Strawser, 1996). Parker and Kohlmeyer (2005) examined the influence job satisfaction and organizational commitment have on perceived discrimination in relation to turnover intentions in three big public accounting firms. Lower organizational commitment and job satisfaction were found to be consequences of job burnout that was impacted by junior accountants' higher levels of job tensions, including their perceived lack of information and control and excessive workload (Chong & Monroe, 2015).

Mentoring relationships and role-modeling, as elements of the work environment, and their relationship as antecedents to the three dimensions of organizational commitment, affective, continuance, and normative, were studied in the public accounting firm context (Stallworth, 2003). Mentoring relationships have a higher impact on the level of staff's affective commitment and direct implications on turnover intentions. Stallworth suggests that these relationships have a higher impact on top level staff's continuance commitment (Stallworth, 2003). Hall and Smith (2009) explored two forms of mentoring psychosocial support and career development support. Merely having a mentor does not impact turnover intentions. Career development mentoring increases an individual's sense of empowerment, which is positively associated with turnover intentions (Hall & Smith, 2009). Other elements of the work environment are the roles and duties of an individual's job. Role ambiguity and role conflict indirectly affect job tension through lack of information and control and excessive workload (Chong & Monroe, 2012). Junior accountants who experience higher levels of role ambiguity and conflict perceive higher job tension, which increases job burnout (Chong & Monroe, 2012).

While much research has been performed in the area of turnover intentions in public accounting in an attempt to understand why employees leave, no research has investigated the relationship between size of public accounting firm, job embeddedness, and job engagement. This study will attempt to bridge that gap in the literature in hopes of adding a deeper understanding of how the size of a firm might be a factor in the retention of employees so that managers, working with that knowledge, can mitigate the impact size has on retention.

Size of Firm

Research on size of firm and its relationship with human resource management (HRM) is prolific. Firm size, strategy, and culture are a few of the organizational contextual variables that can predict human resource management practices (Daft, 1998). HRM practices differ between small and large firms and the size of the firm impacts those practices (Lai et al., 2016; Saridakis et al., 2013; Storey et al., 2010; Wu et al., 2015). De Kok and Uhlaner (2001) studied organizational context and HRM practices and found firm size matters with regards to the use of formal or informal HRM practices, such as performance appraisals and training (Jackson et al., 1989). Small firms vary in their use of HRM practices and those practices are more likely to be informal, flexible, and undocumented (De Kok & Uhlaner, 2001; Jackson et al., 1989; Storey et al., 2010). As organizations grow in scale, formality becomes more necessary (Idson, 1990). Large firms typically have HR departments whereas many small firms operate without an HR department or even an HR manager (Saridakis et al., 2013). In small public accounting firms, the HR function might be given to the manager who is most willing to take on that role or who is considered to be the most effective in that role. Formal HR training might not be a consideration in that appointment. Many large public accounting firms have distinct HR departments whose employees have an HR background and training but possibly little if any accounting knowledge.

Employees in large establishments have less autonomy and say in the type of work they do, how they do it, and their daily schedule and this rigidity in employees' work environment explains lower levels of job satisfaction in larger establishments. (Idson, 1990). Supporting this finding, Kalleberg and Van Buren (1996) found that although employees in large firms have higher earnings, more fringe benefits, and more opportunities for promotion, they have less job autonomy than their colleagues in smaller firms. Job autonomy has been found to be an antecedent of job engagement (Kahn, 1990). If employees in smaller public accounting firms feel they have more autonomy, perhaps they experience higher levels of engagement than their counterparts in larger public accounting firms.

In their analysis of the firm size and workplace size on job quality, Storey et al. (2010) distinguished between workplace (one particular office) size and firm/organization (multi-site offices versus a single office) size. When workplace size increases, formality increases and self-reported job quality decreases (Storey et al., 2010). However, firm size (multi-site workplaces versus single site workplaces) also impacted job quality. Employees who worked in small workplaces/offices owned by larger firms reported lower job quality than their counterparts who worked in a similar-sized office owned by a smaller (single site) firm. Additionally, multi-site workplaces with 5 to 249 employees have more formality than single site workplaces of the same size (Storey et al., 2010). Small firms do not always have the market share or resources that large firms have; instead, they have organizational flexibility that large firms do not have that help them overcome those challenges (van der Weerdt et al., 2006). This flexibility can manifest in numerous ways, including in HRM practices.

Due to the close proximity of employees and partners, it seems that employees and partners at smaller firms will have a closer connection, thus giving partners a better understanding of their employees' career goals, ambitions, and reasons to stay. Those partners, if they choose, have the choice to intervene with their employees and work with them to create an environment that will increase employees' intention to stay. Management intervention can have a pivotal impact on engagement (Bakker & Albrecht, 2018). For example, if an employee would like more variety in their projects, partners in smaller firms that tend to be more generalized (De Kok & Uhlaner, 2001) have a greater opportunity to intervene and work with employees in designing a job list of varied projects. Giving employees a say in job design can lead to higher levels of engagement (Bakker & Demerouti, 2017). Human resource intervention in small and medium enterprises has also become more important in relation to the SMEs' performance over time and its impact on employer turnover (Sheehan, 2014). Storey et al. (2010) found that partners in large firms with multiple offices should give those partners in the individual offices more latitude and discretion in HRM practices so that they can intervene as needed in their respective office. In doing so, the firms could increase their employees job quality which could improve firm performance (Storey et al., 2010).

Organizational commitment is higher in smaller firms than in larger firms (Saridakis et al., 2013). Self-reported job quality is higher in smaller firms (Storey et al., 2010). Levels of trust between managers and their employees are higher in small firms (Forth et al., 2006). A few studies have investigated the relationship between job embeddedness, job engagement, and the size of organizations (Coetzer et al., 2017; Coetzer et al., 2019; Susomrith & Coetzer, 2019). Coetzer et al. (2017) investigated the effect organization size, large or small, has on employees' perceptions of job-embeddedness' links, fit, and sacrifice. The participants in their study were from a variety of organizations across different industries in South Africa. The authors found job embeddedness predicted turnover intentions in large organizations but not in small organizations and work group cohesion moderates the job embeddedness-turnover relationship. Employees in small organizations perceived a greater organization sacrifice than employees in large organizations. Small organizations tend to offer a work environment, such as job autonomy, variety in tasks, and close relationships with their colleagues, that is hard to duplicate in a large organization (Coetzer et al., 2017). These same characteristics offered by small organizations are also antecedents of job engagement (Christian et al., 2011; Kahn, 1990). Contrary to Coetzer et al.'s expectations, employees of large organizations do not perceive a better fit at their organization than employees at smaller organizations. Informal recruiting processes, such as asking for employee referrals of new hires, that are commonly practiced by smaller organizations tend to lead to better "fits" as employees tend to refer those people they know, who they see as a good fit, and with whom they get along (Coetzer et al., 2017).

Coetzer et al. (2019) delved deeper in the on-the-job embeddedness dimensions, links, fit, and sacrifice, within the context of SMEs. They developed conceptual arguments for links between the three dimensions of on-the-job embeddedness and turnover intentions, building specifically on characteristics of SMEs. Recruiting practices of SMEs that rely heavily on word-of-mouth references potentially created closer ties amongst the employees when new hires come from a pool of people current employees know and like (Coetzer et al., 2019). The informality of SMEs (Storey et al., 2010) tends to create open relationships with managers and employees that fosters a more family-like work environment (Coetzer et al., 2019; Lai et al., 2016; Saridakis et al., 2013). An environment like that allows employees to develop stronger links with their colleagues and supervisors in their office, making them more embedded.

Distinct characteristics of SMEs that impact on-the-job embeddedness fit include quick immersion into the firm’s work and social environment, open and fast communication from partners, and task variety (Coetzer et al., 2019). New employees in SMEs are often immersed in firm meetings and events, given coaching time from managers, and projects they find meaningful (Rollag & Cardon, 2003). Smaller firms have an environment that is conducive for partners to successfully communicate the firm’s strategy and vision (Gilbert & Jones, 2000). The close proximity found in SMEs (Marlow et al., 2010) allows for more efficient communication of firm’s strategy and vision, such that employees know if their personal values align with those of their organization. When employees experience this alignment, they tend to stay with their organization (Arthur et al., 2006). Value congruence and meaningful work also increase levels of job engagement (Kahn, 1990; May et al., 2004; Rich et al., 2010).

The dimension of on-the-job sacrifice relates to those resources an employee will give up if they leave their organization. For employees in SMEs, many of these resources are significant intangible benefits, such as job autonomy, job quality, task variety, the family-like environment, and their work relationships (Coetzer et al., 2019).

Susomrith and Coetzer (2019) used employees in small professional service firms as their setting to investigate the impact of informal learning through interaction with both colleagues and managers on work engagement. Large firms tend to have more formal training programs; however, informal training and learning activities in small firms are positively related to work engagement (Susomrith & Coetzer, 2019). Large public accounting firms offer in-house, formal training for their employees that is uniform across all offices. For example, Deloitte University and KPMG Lakehouse are the names of the training centers for two of the Big 4 international accounting firms. These centers are designed for the exclusive training of their partners and professional staff. Small firms do not have those same resources so they often rely on training and classes offered by outside parties, such as state societies. When these classes are offered in person, accountants have an opportunity to interact with other accountants in their community from different firms and to grow their professional network. This allows these employees a chance to develop links outside their office and increase their embeddedness.

The study by Susomrith and Coetzer (2019) analyzed the impact of size of organization on job engagement by examining informal learning practices in small professional service organizations. My study has similar aspects of their study yet extends that of Susomrith and Coetzer in three ways. First, my study includes an analysis of firms of all sizes, not just small firms. Second, the focus of my study is one profession, the public accounting profession, in the United States. Susomrith and Coetzer (2019) included participants from a broad array of professional services, such as accounting, finance, engineering, and real estate, in Australia. Third, my study will include both the job engagement and job embeddedness constructs, whereas Susomrith and Coetzer (2019) only used the job engagement construct.

CPA firm leaders were asked in a recent article published in *Journal of Accountancy* what retention strategies they use to retain their staff (Knopf, 2020). The list included managing burnout, offering flexibility, reducing overtime hours, training, and leading by example. All of these are factors of the work environment that managers have the ability to control in their firm. However, manager/partners at a firm that is part of a much larger national organization might have a lower degree of control than a manager/partner at firm that is of the same size but not tied to a national organization. In the 2021 AICPA's PCPS survey (2021), managing a hybrid work force was one of the top five future concerns for public accounting firms that had more than six employees. This concern is a direct result of the pandemic, work-from-home orders, and the transition back to the office. While it is challenging to manage a new type of work arrangement for most public accounting firms, a hybrid work force poses an opportunity for managers/partners to engage with their employees in discussions about creating work arrangements that benefit both the employee and the firm.

My study will extend research on the impact of the size of an organization by including job embeddedness and job engagement constructs as part of the framework and by surveying accountants of public accounting firms of all sizes across the U.S. Public accounting firms are commonly described as local, regional, national, or "Big 4" international firms. Local firms may have one office or have a few offices, all within a rather confined geographical area. Regional firms have multiple offices across multiple states. National and Big 4 firms have offices across the U.S. and in multiple countries internationally. However, these size descriptions do not necessarily correspond to the number of employees within an office. A Big 4 firm has multiple offices ranging from hundreds of employees to less than 20 employees. A local firm may have up to 30 or more employees. In some cities, a Big 4 office may be smaller than a local firm office.

The AICPA segments firms into size based on number of CPAs/professionals: small (2-10 employees), medium (11-20 employees), and large (21+ employees) (AICPA, 2021).

The public accounting profession faces many challenges, including tight deadlines, client demands, and a constantly changing regulatory environment, that contribute to its busy season demands and high workload. These challenges, along with the Great Resignation, make the retention conversation salient and relevant in the public accounting firm, perhaps more so than before. Managers need to retain talent. The size of the public accounting firms and the flexibility or inflexibility this creates for managers to work with their employees to stay is a relevant piece of the retention literature that has not been studied as a key variable. Managers, through HRM practices such as intervention, can create more embedded and engaged employees who want to stay. For example, if a small firm wants to change firm protocols to reduce busy season overtime and demands, the close proximity of employees and managers should make it easier to obtain employee input, to make collaborative decisions, and to implement those changes. Due to the nature of the job variety in small public accounting firms, employees of small firms might have more opportunities to find tasks, jobs, and projects that are more meaningful to them.

Employees' career goals, the type of jobs they will thrive on, and what motivates them to stay are crucial for managers to know. The partners in a smaller office of a national firm may have a sense of their employees' career goals, ambitions, and motivation to stay; yet they have less control of those factors that impact the motivation and less ability to intervene. Yet, employee and company policies of the Big 4 firm are established in the national office and are to be followed by all Big 4 offices, regardless of the number of employees in the offices. Partners of local firms do not have a national office to answer to and have greater flexibility and autonomy in the procedures and policies it can set. Additionally, those goals and motivation may change over time as the employee's needs and wants change. In order to adapt with the employee as his/her path changes and be able to intervene, partners must have flexibility and autonomy to make changes.

In the larger public accounting firms, job openings are classified by the specific service line, e.g. tax, assurance and attestation services, and consulting. Potential employees, including accounting graduates with little understanding of what those practice areas are, have to make the decision of the type of work they want to do when applying. Once employees of those firms start, they typically stay within that service area unless they request to be transferred to another area. Employees in larger firms who have long tenure with the firm tend to also work for clients in specific industries, such that sometimes they become experts in particular industry accounting matters. In smaller accounting firms, it is expected that employees will work on a variety of tasks and projects, as there is less specialization in smaller firms (De Kok & Uhlaner, 2001).

Most quantitative research on turnover intention within the accounting profession has been within the context of accountants at large public accounting firms (Herda & Lavelle, 2012; Parker & Kohlmeyer, 2005; Pasewark & Strawser, 1996; Pasewark & Viator, 2006; Stallworth, 2003;). One recent study, based in Australia, found career mentoring has a positive impact on both organizational and professional commitment in a study of Australian public accounting firms of all sizes (McManus & Subramaniam, 2014). Pasewark and Viator looked specifically at work interfering with families in public accounting firms and found public accountants working at larger firms experienced greater work interfering with families than those public accountants working at smaller firms (Pasewark & Viator, 2006). This particular study stands alone as one of the few in the accounting and retention literature with a finding that makes a distinction between a large and small public accounting firm. Some research was focused within a geographic area (Parker & Kohlmeyer, 2005) while others used the AICPA's member list to mine for survey participants (Pasewark & Viator, 2006; Stallworth, 2003).

Saridakis et al. (2013) specifically called for future studies to look at job embeddedness and the level of this construct within small and large firms. In that same article, the authors asked if job crafting, opportunities to share views with management and being well-informed by the organization on how the firm is doing, which are all antecedents to job engagement, are easier to do in small firms. The size of a public accounting firm and its impact on partners' autonomy and flexibility in embedding and engaging their employees and how that impacts its employees' intentions to stay has not been studied. Including the size of public accounting firm as an independent variable and not a control variable will be an important contribution to the literature on retention in public accounting and will link retention within a specific profession with job embeddedness and job engagement. Smaller firms, with their lack of flexibility and higher degrees of autonomy, have a greater opportunity to intervene and work with their employees to create higher levels of job embeddedness and job engagement.

H_{1a}: Employees in smaller public accounting firms will have higher levels of job embeddedness than those employees in larger accounting firms.

H_{1b}: Employees in smaller public accounting firms will have higher levels of job engagement than those employees in larger accounting firms.

Job Embeddedness

Mitchell, Holtom, Lee, Sablynski, and Erez (2001) proposed a new construct to the voluntary turnover prediction literature – job embeddedness. Job embeddedness occurs on the job and off the job – the individual is embedded both in the employee's organization and the community in which the employee lives. Job embeddedness has been shown to be a stronger predictor of turnover intentions than other constructs, such as organizational commitment and job satisfaction (Cunningham et al., 2005; Takawira et al., 2014). It is unique from the other constructs used in turnover intention research in that it is a retention strategy (Robinson et al., 2014) and retention construct (Lee et al., 2004). Off-the-job embeddedness affects employees' decisions to participate (voluntary turnover and volitional absences) and on-the-job embeddedness affect employees' decision to perform (organizational citizenship and job performance) (Lee et al., 2004). The three aspects of job embeddedness are link, fit and sacrifice and together they create a network of ties, both in the organization and community, that keep an employee embedded in the organization. Links are the connections an employee has with other people and institutions, both within and outside an employee's organization. Links within the organization would include those with a working team, such as an audit team composed of staff, senior staff, managers, and partners. The quantity and strength of the links influence how embedded an employee becomes. Fit is also both internal and external. Internally, an employee's values and career goals must align with the organizations' culture, requirements, and demands of the jobs. Externally, fit applies to the community and how an individual feels connected to his or her community. Job embeddedness increases when employees' abilities and professional interests are matched with their organization and when they believe they fit in the community (Coetzer et al., 2017). Sacrifice is “the perceived cost of material or psychological benefits that may be forfeited by leaving one’s job” (Mitchell et al., 2001, p. 10). Sacrifice includes potential professional losses, such as job title, compensation, and benefits, and personal losses, such as loss of spouse’s job, good school systems, and service to local organizations.

A study conducted in South Africa examined the job embeddedness and turnover intention relationship in small and large organizations (Coetzer et al., 2017). Coetzer et al. focused solely on the on-the-job links, sacrifice, and fit dimensions and did not include discussion of the off-the-job dimensions. Contrary to several of their hypotheses, their findings suggest (1) no significant difference exists in the role organization links play for the employees of small and large organizations; (2) employees of smaller organizations perceive there is greater organization sacrifice than those at large organizations; and (3) employees of large organizations do not perceive a greater fit in their organization than those at smaller organizations (Coetzer et al., 2017). Employees of small organizations feel they would lose more socially and psychologically if they left their organization than their counterparts at large organizations. The job variety, autonomy, and relationships with colleagues are possible reasons the perception of sacrifice is greater for employees of small organizations. The authors suggested the survey items did not capture the quality of links, focusing rather on the quantity of links.

In public accounting firms, the variety of work and projects employees have narrows as the size of the firm increases from a local firm to a national/international firm. Employees at local firms traditionally touch all areas of services provided, from financial statement preparation to tax returns and research. Employees at national and international firms usually work in one specific area, such as assurance or tax services, and as their experience grows and they have more tenure at the firm, the specific industries in which they work becomes quite narrow. Additionally, at smaller public accounting firms, employees tend to start communicating with clients at earlier stages in their career than their colleagues in large firms. Core to the public accounting profession is the quality of the relationship and level of trust between the clients and the accountants in the public accounting firm. If employees at smaller firms have an opportunity to start developing those relationships earlier, they may have stronger links at an earlier point and feel more embedded in their firm.

Understanding turnover in the nursing field has been the focus of much research as it poses a serious challenge to all areas of heath care at all levels, from patients to administrators. In a review of turnover in the nursing literature, Hayes et al. (2012) found 68 studies conducted since 2006 that examined turnover or turnover intentions of nurses working in healthcare. Most of the research in that time period focused on the internal factors of the organization and did not consider external factors that could impact turnover (Hayes et al., 2012). Fasbender et al. (2019) explored on-the-job and off-the-job embeddedness as two moderators in the job satisfaction and job stress relationship to nurses' turnover intentions. They found that while off-the-job embeddedness can lessen the impact job stress has on turnover intention, on-the-job embeddedness can strengthen the impact job stress has on turnover intentions (Fasbender et al., 2019). Hence, nursing management and HR specialists should focus on both on-the-job and off-the-job embeddedness, in parallel, so that a balance is maintained.

Although it was not a study that included job embeddedness as a construct, Pasewark and Viator (2006) had a similar conclusion to Fasbender et al. (2019) discussed above. They examined work-family conflict and its impact on employees' job satisfaction and turnover intentions. Work that interfered with family had a strong, positive relationship with turnover intentions. However, when flexible work arrangements were offered, the work-interfering-with-family conflict and its relationship with job satisfaction was moderated (Pasewark & Viator, 2006). The authors encouraged future research to examine family-related issues and their impact on turnover, not just focus on work-stress, organizational commitment and mentorship. A shift in focus to those factors outside the firm that impact employees would bring a deeper understanding of turnover (Pasewark & Viator, 2006). Managers should encourage employee embeddedness in both the organization and their community.

Analyzing public accounting firm employees' links, fit, and perceived sacrifice with their community through job embeddedness' community dimension will add to our understanding of the off-the-job embeddedness-turnover intention relationship. Employees at local or regional firms may be more embedded in their community as managers and partners of those firms may encourage employees to pursue local volunteer opportunities with any entity they choose. While national firms might also encourage their staff to volunteer, they may have specific entities that the national office supports.

The inclusion of a community dimension with an organization dimension and its focus on why employees stay with an organization distinguish job embeddedness from affective commitment (one of the three dimensions of organizational commitment), job satisfaction, and job alternatives (Jiang et al., 2012). Jiang et al. (2012) looked at three moderators of the job embeddedness – turnover relationship, including organizational type. They hypothesized job embeddedness will have a stronger effect on public employees as they tend to value intrinsic factors, such as job content, more than private employees. Private employees tend to be motivated more by pay and promotion (Lyons et al., 2006; Perry, 1997, 2000), thus they value achievement more than alignment with organizational or community values.

Job embeddedness is being researched more frequently as a predictor of turnover intentions (Coetzer et al., 2017, Jiang et al., 2012, Yang et al., 2011). However, little research has been done to understand in what type of situations job embeddedness decreases likelihood of turnover intentions. In contrast to the Jiang et al.'s (2012) hypothesis discussed above, I assert that individuals in private organizations do place as much value on fit and alignment with their organization and communities' values as those individuals in public organizations. Managers of public accounting firms can assist employees in creating links with others in the community by encouraging them to volunteer for causes for which they feel passionate and introducing them to others who have the same passion. Many clients of public accounting firms are small businesses whose owners are active in the community. By helping employees develop relationships with the clients, who employees may interact with outside of the firm, and by encouraging involvement in the community, managers can increase employees' level of job embeddedness. Additionally, it takes time to develop respectful relationships with both colleagues and clients. The possibility of sacrificing those relationships that took time and effort to build might be too much for an employee to give up and thus they may be more inclined to stay. Because turnover intentions are related to job embeddededness, I hypothesize that:

> **H_2**: An individual's level of job embeddedness is negatively related to turnover intentions.

Job Engagement

Public accountants can be engaged in multiple ways at their firm. They can find meaning in the projects they are working on, support from their colleagues and managers, or adequate job resources available during times of heavy workload. Accounting firms want their employees to be engaged at work. Since Kahn's (1990) study looking at engagement in summer camp counselors and architecture firm employees, research to understand the antecedents and consequences of engaged employees has become increasingly popular. Multiple studies have demonstrated the benefits of engaged employees, at individual, team, and organizational levels. Engaged employees not only invest themselves in their work but also invest in their firm and are willing to go beyond their individual work tasks to help others in the firm (Rich et al., 2010). Empirical studies suggest that highly engaged employees are related to higher levels of organizational commitment behavior, value congruence, psychological climate, customer service, affective commitment, job and task performance, and productivity (Christian et al., 2011; Fleming & Asplund, 2007; Rich et al., 2010; Shuck et al., 2011; Xanthopoulou et al., 2009). Engaged employees tend to have higher in-task performance (Christian et al., 2011). When organizations focus on engagement at the organizational level and look at strategic alignment and senior leadership, managers create a positive engagement environment and increase job resources, which relates to employee engagement (Albrecht et al., 2018). Adequate job resources allow employees to cope and work well in challenging work environments (Bakker & Demerouti, 2014). Job crafting, the concept of allowing employees to design their work environment to find meaning in their work tasks (Wrzensniewski & Dutton, 2001), improves meaningful work, which has been associated with increased levels of employee engagement (Vermooten et al., 2019). In multiple recent studies on engagement, employees who find their work to be meaningful were more engaged in their work (Geldenhuys et al., 2014; Jung & Yoon, 2016; Shuck, 2019; Steger et al., 2013; Vermooten et al., 2019). These results align and support Gallup's and PWC's survey results that indicate employees want to have fulfilling work and want their values to match those of their organization. Managers who can work with individual employees in their job design have a greater ability to fit employees best with work that is meaningful to them. They have the ability to create a work environment that provides meaning to employees that could increase engagement and job embeddedness. Finally, multiple studies have shown engagement to be predictor of turnover intentions (Saks, 2006; Saks, 2019; Schaufeli & Bakker, 2004; Shuck et al., 2011; Vermooten et al., 2019). Yet, none of these studies have looked at engagement and its relationship with turnover intentions in public accounting firms. There is a gap in the literature on how size of public accounting firm impacts engagement. This study will be the first to my knowledge that brings together the size of firm, job embeddedness, job engagement, and turnover intentions streams of literature within the public accounting firm context.

All of these benefits or consequences of engagement are salient to firms. Research and practice show trends that human resource departments/managers need to look at engagement as a holistic concept, implementing it throughout all levels of the firm and in all human resource policies and procedures (Albrecht et al., 2015; Bakker & Albrecht, 2018). Yet, the lack of a singular definition of the engagement continues to be an in issue in the engagement literature (Christian et al., 2011; Saks, 2019; Schaufeli, 2013; Simpson, 2009). There is agreement amongst engagement scholars that engaged employees have high levels of energy at work and strong identification with their work (Bakker et al., 2008). However, it is easier to recognize engaged employees than to define the term “engagement” (Schaufeli, 2013). In their research on identifying an agreed-upon definition of engagement and analyzing engagement as a predictor of job performance, Christian et al.’s conceptual framework (2011) define job characteristics, antecedents of work engagement, as having the following items: autonomy, task variety, task significance, problem solving, job complexity, feedback, social support, physical demands, and work conditions. Christian et al. (2011) define work engagement as “a relatively enduring state of mind referring to the simultaneous investment of personal energies in the experience or performance of work” (pg. 95). In a meta-analysis review, Shuck (2011) reviewed the academic definitions of engagement and identified four approaches: needs-satisfying approach; satisfaction engagement approach; multidimensional approach; burnout-antithesis approach.

The needs-satisfying approach is based on Kahn’s (1990) definition of personal engagement. Kahn (1990) defined engagement as a person’s demonstration of “preferred self in task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotional) and active, full performance” (p. 700). Engaged employees are connected to their work and to others (Kahn, 1992) and invest themselves fully in their work performance. Engagement is more than just involving oneself physically, cognitively, or emotionally to job tasks – it is the engagement of these energies simultaneously (Kahn, 1992). When individuals invest their personal selves in their work roles, they are able to apply themselves expressively, behaviorally, and energetically in a holistic way (Christian et al., 2011; Kahn, 1992; Rich et al., 2010). May et al. (2004) tested Kahn's (1990) three psychological conditions in an empirical study and found meaningfulness to have the strongest positive association with engagement. Interactions with both colleagues and clients can also increase or decrease an employee's sense of meaningfulness. In his effort to understand engagement, Kahn (1990) conducted two separate qualitative studies, one of summer camp counselors and one of employees of an architecture firm. Clients, in the form of campers and builders in Kahn's (1990) study, diminished a sense of meaningfulness when they showed lack of respect or appreciation or did not allow an individual to do what he/she was trained to do. Architects who worked with builders, their clients, that respected the architects' abilities and knowledge, treated the architects professionally, and did not try to overstep the professional line, felt a greater sense of meaningfulness in the work they performed. Employees of public accounting firms may have similar feelings about their work. While accountants work with standards and numbers, an important key to the profession is the relationships between public accounting firm employees and their clients. If they feel their clients respect them, appreciate their work, and allow them to do that work as needed, maybe the public accounting firm employees will feel an increased sense of meaningfulness.

The Satisfaction Engagement approach is based on the Gallup Organization's work with engagement (Schaufeli, 2013; Shuck, 2011). Harter et al. (2002, 2003) define engagement as "the individual's involvement and satisfaction as well as enthusiasm for work (Harter et al., 2002, p. 269). When managers understand and respond to each of their individual employees and their unique needs, their employees experience a greater sense of joy, interest, and caring (Harter et al., 2003). Although this concept seems to overlap with the job satisfaction construct, its contribution to this field is important in that the research has shown significant links between employee engagement and organizational outcomes, such as productivity, profitability, and customer satisfaction-loyalty. Harter et al. (2002, 2003) use The Gallup Workplace Audit Q^{12} survey, which was designed primarily for use in practice by managers. The survey is based on the concept that organizations who put in place actions that establish clear expectations, provide basic material/equipment needed, allow learning and growth, and encourage connections, contributions, and fulfillment will increase their employees' positive emotions, thus increasing their engagement (Harter et al., 2002, 2003).

The Multidimensional Approach is based on Sak's (2006, 2019) work of separating engagement into multidimensions. Saks (2006, 2019) extended Kahn's definition of personal engagement and Schaufeli et al.'s work engagement (2002), classifying employee engagement into two parts: job engagement (an employee's work role) and organization engagement (role employees play in their organization). Saks' (2006) study was one of the first empirical studies to analyze antecedents and consequences of employee engagement. His research was framed within the social exchange theoretical framework, arguing that employees will be more willing to invest in their work roles when they feel their organization is providing significant resources (Saks, 2006). Saks (2019) revisited his study ten years later, providing an updated list of antecedents and consequences. In his 2019 work, Saks (2019) expanded his list of engagement antecedents to include fit perceptions, opportunity for learning and development, job demands, and personal resources. Skill variety, one element of job characteristics, is the strongest predictor of job engagement in both his 2006 and his 2019 studies. He stated the specific need for future research to analyze the effects different job characteristics have on job engagement (Saks, 2019). However, managers at different size firms may have different levels of control and autonomy to work on job design and skill variety for each individual. Examining firm size will provide additional understanding of the impact firm size has on managers' autonomy and flexibility in changing elements of the work environment, such as job design and skill variety, to increase employee engagement. Employees at local firms tend to work on a variety of projects, ranging from bookkeeping to tax planning to financial statement preparation. Staff at large public accounting firms pick a service, such as audit or tax, when they apply for the staff position. Switching to another service in a large accounting firm is more complicated and requires discussions with partners and additional planning for a shift in job tasks.

The Burnout-Antithesis approach presents the definitions of Maslach and Leiter (1997) and Schaufeli et al. (2002). Maslach and Leiter (1997) characterize engagement as a continuum with engagement on one end and burnout on the other end. Engagement's three components – high energy, high involvement, and high efficacy – are the opposite of the three components of burnout – exhaustion, cynicism, and inefficacy (Maslach & Leiter, 1997; Simpson, 2009). Those scholars who use Maslach & Leiter's continuum approach often use the Maslach Burnout Inventory (MBI) scale (Maslach et al., 1996) or the Oldenburg Burnout Inventory scale.

Most academic research in the area of engagement uses the definition by Schaufeli et al. (2002) (Albrecht, 2013; Bakker et al., 2008; Saks, 2019; Schaufeli, 2013). Schaufeli et al. (2002) define work engagement as a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p.74). This approach at analyzing engagement views engagement as a distinct concept from burnout, not the opposite of burnout. Vigor is the level of energy and mental resilience while working, the willingness to invest in work, and persistence with work tasks. Dedication is the level of involvement with one's work and the sense of significance, pride, challenge, and inspiration. Absorption is the level of full concentration and how engrossed one is with the work, the extent it is hard to detach from the work task, and times passes quickly. Schaufeli et al. (2002) developed the Utrecht Work Engagement Scale (UWES), a self-reported questionnaire that includes the three characteristics of work engagement: vigor, dedication, and absorption. Most of the research that uses this definition uses the Job Demands-Resource model (Demerouti et al., 2001) as the theoretical framework (Bakker & Demerouti, 2017; Simpson, 2009).

Research on the antecedents or component variables of engagement is growing as practitioners and academics realize the importance of managing the variables that increase employee engagement. Adding to the work done by Saks (2006, 2019), Nel and Linde (2019) identified the many antecedents that have been associated with high levels of engagement since Kahn's work in 1990. Saks (2019) found that skill variety is the best predictor of job engagement. One of the primary advantages for new employees at small public accounting firms is that they typically perform a variety of tasks for all the different services the firm provides as well as working on a client from a variety of industries. They obtain a wide breadth of knowledge of the many types of services and industries; thus, employees at small public accounting firms may have higher levels of engagement since their variety in tasks is greater than their colleagues in large firms.

Organizational socialization for new employees in the first year at the firm help to promote and maintain new employee engagement (Saks & Gruman, 2018). When managers use respectful communication to create a respectful work environment, early career employees feel valued for themselves as individuals and their work accomplishments, thus their job engagement, job satisfaction and loyalty/retention increase (LaGree et al., 2021). Small public accounting firms do not normally have a human resource department responsible for new employee training and onboarding. New employees at small public accounting firms have almost immediate access to the managers and partners of the firm and are encouraged to use these colleagues as resources. Because of this possible closer and more immediate connection with managers and new employees in public accounting firms, there might be a greater level of respect between managers and employees. Supervisory and colleague support for nurses during COVID had both a direct effect on nurse engagement and an indirect effect through the possibilities of professional development (Contreras et al., 2020). Thriving at work, an employee's investment of their energies in learning and gaining knowledge, increases their engagement at work. When employees thrive at their firm, they are open to challenges and are excited about working towards their goals, while also being willing to work with and sharing with their colleagues their knowledge and experiences. This increased level of prosocial behavior allows employees to be more engaged. Along with thriving at work and prosocial behavior, a civil environment within the firm that promotes respect, courtesy, and politeness were found to increase engagement (Abid et al., 2018).

Rich et al. (2010) analyzed the links between engagement and job performance, mediated by value congruence, perceived organizational support, and core self-evaluation. Engaged firefighters not only invested themselves in the calls and emergencies they had to go to but also contributed to organizational matters in helpful ways. Value congruence is the alignment of an individual's personal values with those values of their organization. When this congruence occurs, employees will be more willing to invest in their organization, resulting in higher levels of employee job engagement. Allowing employees to craft their work, where they look for fit between their values and work environment, physically and cognitively, increases their belief in the meaningfulness of their work and was shown to be a predictor of engagement (Vermooten et al., 2019). If public accounting employees feel a fit with the work they perform and believe the organization they work for has similar values to them, they could find more meaning in their work and have higher levels of engagement.

Based on their literature review of 265 articles on employee engagement and its antecedents, Wollard and Shuck (2011) created a conceptual model of individual antecedents and organizational antecedents to employee engagement. The organizational antecedents are strategies, practices and conditions of an organization that allow for the development of employee engagement. Wollard and Shuck (2011) categorized antecedents to engagement as both individual antecedents that apply directly to individual employees and organizational-level antecedents that are the foundational support within an organization that allows for and fosters employee engagement. They emphasized there is not a one-size-fits all list of antecedents that will work for all organizations; rather, different organizations will have to find those antecedents that create engagement in their respective organizations (Wollard & Shuck, 2011). Saks (2006) examined the role of job characteristics and social support on engagement but stressed other factors might impact employees differently. As Wollard and Shuck (2011) do, Saks encourages management not to focus on a one-size fits all approach to employee engagement. Each employee will have different levels of skill variety, different career aspirations, and personal needs. If engagement is different for each employee, managers must recognize the differences in their employees, which means they have to know and understand the unique needs and skills of their employees. This greater understanding will help them connect the needs of their employees with those of the firm. Perhaps managers in small public accounting firms have a more flexibility and autonomy in creating individual approaches for each of their employee's engagement, whereas managers in large public accounting firms have less opportunity to veer from the approach set by the national office.

A recent trend in engagement research, one that Bakker and Albrecht (2018) highlight as one of the most important, is a focus on management intervention and its impact on engagement. Understanding and increasing knowledge of the mechanisms of engagement is important but how managers implement different engagement tools to influence their employee engagement at the individual, team, and organizational level is equally important. Job design, initiatives, and programs that offer support for employees are ways managers can increase engagement. Managers have a role in engagement and can and should encourage meaningfulness by effective job design and human resource policies and procedures. By fitting employees with particular work roles, management can increase their employees' level of engagement. Managers must understand their employees' goals and desire to effectively match their employees with work tasks (May et al., 2004). Additionally, engagement may vary as it is a function of tenure, nature of the job, and position at the firm, which all change (Saks, 2019). Elements, factors, and job characteristics that work one year may not work next year for the same employee and elements and factors that work for one level of position might not benefit another level of position. By surveying all levels of positions in public accounting firms, my study will examine this idea that engagement varies at different levels of positions and tenure at the firm. If skill variety is one of the strongest predictors of job engagement, managers might want to take time to work on individual employee's job design and skill variety to increase engagement (Saks, 2019). A manager's ability to intervene may be impacted by the size of the organization. This study aims to understand the impact of the size of a public accounting firm on the managers' ability to intervene and to change policies and procedures to increase employees' level of engagement.

Bakker and Albrecht (2018) called for future researchers to refine engagement understanding by examining engagement in specific industries and occupations, identifying those resources and demands that have the most impact on engagement in those industries and occupations. Public accountants can become engaged through multiple avenues in their firm. Meaningfulness is one avenue. The type of projects accountants work on, those they find challenging, varied, and complex that demand new skills can increase their sense of meaningfulness, thus their level of engagement (Kahn, 1990). Client relationships are another avenue. Public accounting firm employees work with their clients daily. Having respectful, courteous relationships with these clients can increase levels of engagement. Strong, respectful relationships with colleague is yet another avenue to foster engagement. Much of the services provided by public accounting firms require employees at all levels to work together. Studies have shown that higher levels of engagement reduce employee's turnover intentions. Many of the characteristics of the public accounting firm culture and environment allow for employees to become engaged, through their work on client services and their relationships with their clients. Because turnover intentions are related to job engagement, I hypothesize that:

H_3: An individual's level of job engagement is negatively related to turnover intentions.

Ties between Job Embeddedness and Job Engagement

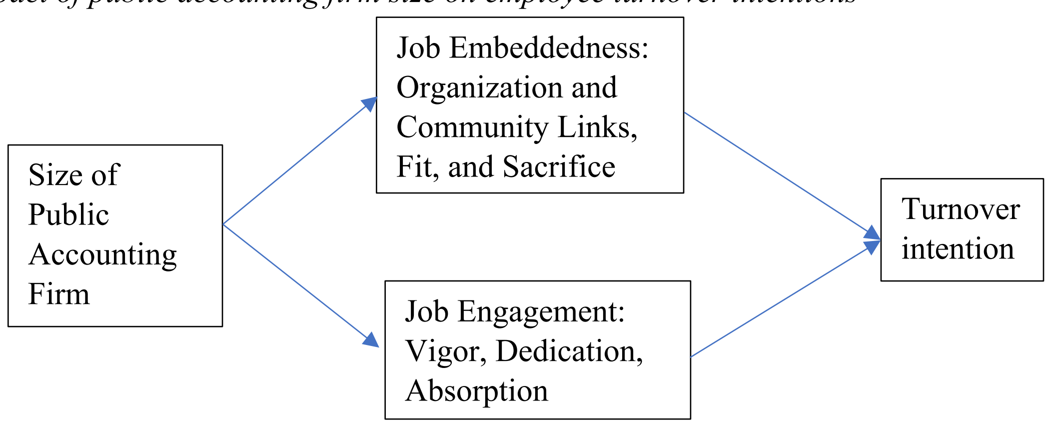
In the past couple of decades, job embeddedness and job engagement have become widely studied constructs that examine why employees choose to stay at their firm. Employees are more embedded when they have respectful, courteous relationships with those in their work world and their community, when they feel their values align with the firm and fit in with their community, and when they perceive there would be great personal and professional sacrifice if they left their firm. Employees who attack their work with resilience and persistence, who feel inspired, challenged, and proud of their work, and get caught up in their work are engaged employees. Prior research has shown job embeddedness and job engagement to be different constructs (Halbesleben & Wheeler, 2008; Takawira et al., 2014), with job embeddedness related to the organization, community and firm and job engagement related to psychological attachment to and investment in work. Job engagement is tied to the nature of the work and can be fleeting, fluctuating more often as the tasks, projects, and client interactions change. Job embeddedness is perhaps more holistic, encompassing both an employee's personal and professional life, takes more time to develop, thus making it possibly more stable than job engagement.

Studies analyzing the relationship between job embeddedness, job engagement, and turnover intentions are limited (Takawira et al., 2014). Takawira et al., (2014) used both constructs to examine turnover intentions at a higher education institution and found employees had lower turnover intentions when they were embedded with the institution and were engaged in their work. Engaged employees are highly connected with their work tasks and are willing to step outside of their job description to assist coworkers and their organization (Christian et al., 2011; Rich et al., 2010). By reaching outside their prescribed tasks due to high levels of engagement gives employees an opportunity to create more links within their organization, increasing the on-the-job embeddedness. Allowing employees to craft their work, where they look for fit between their values and work environment, physically and cognitively, increases their belief in the meaningfulness of their work and was shown to be a predictor of engagement (Vermooten et al., 2019). Fit, one of the three characteristics of job embeddedness, is an employee's perceived alignment of their values and career goals with their organization's culture, requirements, and demands of the job. I posit this increased investment by employees can strengthen the links and fit an individual has with his or her organization, thus increasing both on-the-job embeddedness and engagement.

Retention in public accounting firms continues to be a top concern for firm leaders in firms of all sizes. Using job embeddedness and job engagement to analyze turnover intentions in public accounting firms has not been done. Yet, the characteristics and dimensions of these constructs make for a good pairing in examining turnover intentions in public accounting firms for two reasons. First, job engagement is more short-term and granular, while job embeddedness is more long-term and holistic. These distinctions allow for a study that analyzes the impact of micro level tasks and work and macro level relationships and value alignment on an employee's level of embeddedness and engagement. Second, what a manager can or cannot do to help increase an employee's level of embeddedness and engagement could change as the size of the firm changes. Are employees at small firms more engaged and embedded than their counterparts at large firms? The answer to this question could shed light on the impact size, one of the principle defining characteristics used in describing public accounting firms, has on employee retention. In addition, it could provide a base of future research that delves deeper into specific aspects of each construct.

Figure 1

Impact of public accounting firm size on employee turnover intentions



Chapter 3: Method

Introduction

This study examines the relationship between the size of public accounting firms, job embeddedness, job engagement, and turnover intentions. Accountants working in public accounting firms have always faced a variety of pressures, including the fast pace of regulatory changes, tight deadlines set by numerous third-party groups, and client demands, while also striving to uphold a core principle of the profession – serving and meeting the needs of the public. With the rollout of a variety of government COVID-19 relief programs for businesses in a tightly condensed period of time, public accounting firms had to sprint to understand the rules of the programs, to identify the specific programs their business clients met the requirements for, and to assist their clients in gathering the required information. The Great Resignation continues to affect all industries, including public accounting firms. For example, as firms have shifted to remote work, many employees in public accounting firms now have an opportunity to work for firms in other cities that provide higher compensation and better benefits, while not physically moving. These factors have placed an enormous amount of pressure on a profession that has a long history of struggling to retain talent.

Retention strategies being executed in top public accounting firms to address this additional pressure brought on by the pandemic have become even more popular topics in accounting practice journals. A *Journal of Accountancy* article published in 2020 discussed retention strategies used by CPA firm leaders and the list included managing burnout, offering flexibility, reducing overtime hours, training, and leading by example (Knopf, 2020). In another 2022 *Journal of Accountancy* article, Pitstick (2022) provides the three strategies top accounting firms are utilizing as motivators to keep employees: raising starting salaries; investing in their employees' well-being; and transitioning some tasks to automated processes to allow for higher-level work. Survey results from Gartner show that 82% of employees want their organizations to recognize them as individuals; however, only 45% of these employees believe this occurs (Gartner, 2021). While the strategies provided by the *Journal of Accountancy* sound solid and effective, two pieces key to this problem are being overlooked. One, blanket strategies to cover all employees uniformly are not effective; instead, management must try to understand what strategies will work best with each of their employees as individuals. Two, based on prior research, size of firm impacts the flexibility managers have in implementing these strategies.

Job embeddedness is characterized by the numerous ties an employee has with his or her organization and community (Mitchell et al., 2001). The more "stuck" an employee is, both within the organization and the community, the harder it is to leave the organization. Kahn (1990) originally defined job engagement as giving everything one has to the job. Many of the factors that influence job embeddedness and job engagement can be managed by firm owners/partners/managers. However, the size of the firm may impact the autonomy and flexibility managers/partners have in managing these factors. The size of firm will likely impact the use of human resource management practices and the types of practices used will vary between small and large organizations (Lai et al., 2016; Saridakis et al., 2013; Storey et al., 2010; Wu et al., 2015). Job characteristics that vary between small and large organizations, such as job autonomy, job quality, levels of formality, task variety, meaningful work, training, and development opportunities, have been shown to impact job embeddedness and job engagement (Coetzer et al., 2017;

Coetzer et al., 2019; Rollag & Cardon, 2003; Susomrith & Coetzer, 2019; Storey et al., 2010). The impact that size of public accounting firms has on employees' levels of job embeddedness and job engagement has not been studied. This study aims to fill that gap in research by investigating the impact size of firm has on turnover intentions through the constructs of job embeddedness and job engagement.

In this chapter, I describe the research design of my study, the participant demographics, the data collection process, the survey instruments used, and the data diagnostics and analysis used in analyzing the survey results.

Research Design

The study employed a nonexperimental quantitative survey research design to address turnover intentions in public accounting firms, specifically analyzing the relationship between the size of a public accounting firm, the constructs of job embeddedness and job engagement, and the turnover intentions of the full-time professionals of the public accounting firms. Quantitative research is either experimental or nonexperimental (Gelo et. al, 2008). Nonexperimental design differs from experimental design, a design that consists of a control group and experimental group, in which assignment to groups is randomized (Rutberg & Bouikidis, 2018). In a nonexperimental design, independent variables are not manipulated by those conducting the research (Johnson, 2001; Rutberg & Bouikidis, 2018) and the objective of the design is to understand and describe the relationship between two or more variables (Gelo et. al, 2008).

Nonexperimental quantitative research can be descriptive, predictive, or explanatory (Johnson, 2001). Descriptive nonexperimental research attempts to describe and document characteristics of a phenomena. Predictive nonexperimental research is designed so researchers might be able to predict an event or phenomena in the future without analyzing potential cause and effect relationships. In explanatory nonexperimental research, the goal of the study is to explain a phenomenon by investigating factors that could change the way a phenomenon behaves (Johnson, 2001). Because the goal of this research was to discover if firm size could change an employee's level of job embeddedness and job engagement, which might impact that respective employee's turnover intentions, an explanatory nonexperimental quantitative research design was used.

Participant Demographics

Due to the nature of the distribution of the survey, the number of people who could have taken the survey is unknown and response rate is not able to be calculated. Additionally, because of who I asked for assistance in distribution, I did not send out a reminder email to encourage survey participation. I reposted the survey midway through the collection period on LinkedIn and Twitter and asked colleagues who are active on both platforms to repost for me. The total number of responses to the survey was 197. However, only 136 responses were usable, after eliminating responses that did not answer any of the questions or any of the survey items past the demographic questions. The sample of responses are discussed in detail in chapter 4.

Data Collection

Permission to collect data was sought and obtained from the University of Missouri-St. Louis' Institutional Review Board (IRB). After permission was obtained, I started the data collection process. As mentioned earlier, data for this research was collected through a survey of full-time professionals at all levels of position in public accounting firms. My strategy for obtaining survey participation was multipronged. I sent emails to all the CEOs/Executive Directors of the 50 CPA state societies, as well as to the leaders of the Greater Washington, Guam, Puerto Rico, and Virgin Island societies, asking for their assistance in distributing the survey to their members. Through my connections with the AICPA, I reached out to representatives at public accounting firms of all sizes to try to obtain a sample of participants from small, medium, and large public accounting firms and asked them to solicit volunteers from their firm. I am a graduate of the 2012 AICPA Leadership Academy. Every year, the AICPA selects a group of 36 young CPAs from across the nation to participate in their Academy. The Academy was created in 2009 and has a very active alumni group across social media platforms. I contacted specific Academy alumni that I knew personally for assistance in survey distribution and posted the survey to the closed Facebook Leadership Academy group. I worked with Boomer Consulting, a company that consults with over 1,600 CPA firms across the nation. The company agreed to distribute the survey to their listserv of over 15,000 people. Finally, social media platforms, LinkedIn and Twitter, were used to solicit public accounting firm full-time professional employees.

A link to the electronic survey was sent from my UMSL email account or provided as a link in the social media posts. Participation in the survey was voluntary (self-selected) and was stated as such in the instructions for the survey. Participants were allowed stop at any point while taking the survey. All survey results are anonymous. No identifying information, such as the name of the participant and their firm name, was collected in the survey. Responses to the survey were collected from August to November 2022.

A power analysis was conducted using G*Power 3.1.9.7 (Faul et al., 2007) to determine the minimum sample size required to test my hypotheses. For multiple regression, the results of my power analysis indicated that a minimum sample size of 103 is needed to yield a statistical power of at least .8 with an alpha of .05 and a medium effect size. Thus, my obtained sample size of 136 is adequate to test my hypotheses.

Instrument and Measures

The focal independent variables of this study are firm size, job embeddedness, and job engagement. The dependent variable is turnover intentions. Three control variables are organizational commitment, perceived job alternatives, and job satisfaction. All measures are self-reported. The survey had three parts. The first part explained the purpose of the research and obtained informed consent as well as demographic information. The demographic information included age and gender; however, the bulk of the demographic information obtained was related to information regarding the participants' firm. Participants were asked how many full-time professionals work in their office; the number of offices within the firm; the participant's position at the firm; the length of time working as a professional within an accounting firm; the number of accounting firms at which the participant has worked, including the current firm; the length of time at the current firm; the highest degree obtained; the year the participant graduated from their highest level of education; and the credentials and/or designations held by the participant.

The second part of the survey contain the measures for all the above-mentioned variables. All survey items regarding the variables (excluding the demographic information) used a 7-point Likert Scale. Job embeddedness, turnover intentions, commitment, and job satisfaction used ratings from strongly disagree (1) to strongly agree (7). Job engagement used the ratings never (1) to always (7) and job alternatives used the ratings not likely (1) to very likely (7). These questions were not asked in random order. The final part of the survey included a question regarding the aspects of their firm the participants like best. This question captures different elements that contribute to an employee's level of job embeddedness and job engagement. While the questions will not be used as a measurement for any one variable, they will provide insight to specifics elements of their firm they like that will add depth to the results. See Appendix A for the survey instrument.

Independent Variable – Size of Firm.

This study measured size of firm by the number of full-time accounting professionals in the firm. This variable is a continuous variable with participants asked to give an estimate of the number of professionals.

Dependent and Independent Variable – Job Embeddedness.

Mitchell et al. (2001) created the original job embeddedness measure that has 40 items. In this study, job embeddedness is measured using an adapted version of the short job embeddedness form created by Holtom et al. (2006). Holtom et al. (2006) found a strong product-moment correlation (r = .92) between Mitchell et al.'s (2001) long version and their revised short form. This approach was used by Coetzer et al. (2017), Felps et al. (2009), and Cunningham et al. (2005). Holtom et al.'s short form has 21 items that were all part of the original 40-item measure created by Mitchell et al. (2001). The last three questions in Holtom et al.'s short form are "yes or no" questions. Those questions are not included in this survey as they did not relate specifically to any of the dimensions but rather asked about being married, a spouse who works outside of the home, and owning a home. The 18 items that were included in the survey represent the six dimensions of job embeddedness: organization link, organization fit, organization sacrifice, community link, community fit, and community sacrifice. Items include "I feel like I am a good match for this firm", "I am a member of an effective work group", and "I really love the place where I live". Of the 18 items used, 9 of the items assess the respondents' perception of their embeddedness in their firm and 9 assess the perception of embeddedness in the community. The use of the 18 items, and not the 21 items, was used successfully by Coetzer et al. (2017) and Felps et al. (2009). The Cronbach alpha of the two studies mentioned above were .88 and .83, respectively. The Cronbach alpha in this study was .88[2].

Dependent and Independent Variable – Job Engagement.

As noted in the literature review, there are multiple definitions of job engagement. The definition used in this study and in most academic research (Bakker et al., 2008; Albrecht, 2013; Saks, 2019; Schaufeli et al., 2013) is that of Schaufeli et al. (2002). Schaufeli et al. (2002) developed the Utrecht Work Engagement Scale (UWES), a self-reported questionnaire that includes the three characteristics of work engagement, vigor, dedication, and absorption, as defined by Schaufeli et al. (2002). In this study, job

[2] Cronbach's alpha is the most commonly used reliability coefficient (Meyers et. al, 2016). Coefficients of .90 or better are excellent, high to middle .80s are very good, .80 or lower is good, and .70 is adequate (Meyers et. al, 2016).

engagement is measured using the short Utrecht Work Engagement Scale (UWES-9) that has 9 items. The UWES-9 was created by Schaufeli et al. (2006) after conducting an analysis of data collected across 10 countries. The shortened version of the questions was highly correlated with the longer version, explaining about 80% of the variance and having good internal reliability. Although the definition of engagement has 3 characteristics, vigor, dedication, and absorption, Schaufeli et al. (2006) combined the three subscales into a composite score. The composite measure was used successfully by Vertmooten et al. (2019). Items include “At my work, I feel bursting with energy”, “I am enthusiastic about my job”, and “I get carried away when I’m working.” The Cronbach alpha in Schaufeli et al.’s 2002 construction of the UWES-9 varied between .85 and .92 across the 10 countries. The Cronbach alpha in this study was .95.

Dependent Variable – Turnover Intentions.

Turnover Intentions will be measured using 3 items adapted by Nouri and Parker (2013) in a study on career growth opportunities and turnover intentions in public accounting. The three items use the word “stay” / “remain” instead of “leave”, such as “I plan to remain with my current firm for at least as few years.” As the job embeddedness and job engagement constructs are considered retention constructs (Robinson et al., 2014), the use of these 3 items more clearly aligns with those constructs. The term “Turnover Intentions” was used instead of “Stay Intentions” to stay aligned with the literature on turnover intentions of employees. Reliability was measured by Nouri and Parker (2013) using Cronbach alpha and the coefficient in their study was .94. The Cronbach alpha in this study was .93.

Control Variables.

The field of study focusing on turnover intentions in the accounting profession is large and the two constructs most used as a lens for these studies are organizational commitment and job satisfaction (Nouri & Parker, 2020). Accountants are in high demand, especially those with experience in public accounting firms, and often have several alternative job options. Given that the focal independent variables in this study as predictors of turnover intentions are job embeddedness and job engagement, I want to control for those constructs that have been commonly used in other studies and that relate to most accountants with public accounting firm experience. *Organizational commitment* was measured using a nine-item scale developed by Mowday et al. (1979). This scale has been used in multiple studies done within the accounting profession on organizational commitment and turnover intentions (Aranya et al., 1982; McManus & Subramaniam, 2014; Nouri & Parker, 2013; Parker & Kohlmeyer, 2005). The questions used in my survey are from Nouri and Parker's (2013) study on career growth opportunities, commitment, and turnover intentions in public accounting firms. Items included "I talk up this firm to my friends as a great firm to work for" and "This firm really inspires the very best in me in the way of job performance." The Cronbach alpha in the Nouri and Parker (2013) study was .93. The Cronbach alpha in this study was .89.

Perceived job alternatives were measured using a two-item scale created by Mitchell et al. (2001) in their study on job embeddedness as a new construct to study turnover intentions. The two questions focused on the employee's perception of the probability of finding an acceptable alternative to the current job. The Cronbach alpha in Mitchell et al.'s (2001) study was .93. The Cronbach alpha in this study was .90.

Job satisfaction was measured using a global six-item scale used in multiple studies conducted on job satisfaction and turnover intentions within the accounting profession (Ketchand & Strawser, 1998; Pasewark & Viator, 2006; Rusbult & Farrell, 1983; Viator, 2001). Items asked included “All things considered, I am extremely satisfied with my current assignments and responsibilities” and “My current work compares very well to my ideal job.” The Cronbach alpha in Rusbult and Farrell’s (1983) longitudinal study was .93 and .95 (four different time periods). The Cronbach alpha in this study was .92.

Data Diagnostics and Analysis

SPSS 27 was used in this study to conduct the data analysis. Before I started my data analysis, I screened all of my variables for missing values and outliers. The cases were screened for missing values on the independent and control variables, job embeddedness, job engagement, Commitment, Job Satisfaction, and Job Alternatives, using SPSS Missing Value Analysis. One missing value was found on the variable Job Alternatives; there were no missing values on the other variables. Little’s MCAR test was computed to determine if the missing value was missing completely at random (MCAR), missing at random (MAR), or not missing at random (NMAR). The null hypothesis for Little’s MCAR test is that data are MCAR and the test is evaluated with a chi square statistic at an alpha level set at .05 (Meyers et al., 2016). The results in this study of Little’s MCAR test were not statistically significant ($p = .866$), thus it was concluded that the missing data are MCAR. Listwise deletion is an acceptable approach to addressing missing data when missing data are MCAR, but not if data are MAR or NMAR (Meyers et al., 2016). Because there was only one case missing on the control variable, I applied a listwise deletion approach in this study. This brought the sample size to N = 125 when the control variable, job alternatives, was included in the analysis.

As stated above, the total number of responses to the survey was 197. However, only 136 responses were usable, after eliminating responses that did not answer any of the questions or any of the survey items past the demographic questions. Before screening for outliers, some of my variables exhibited high levels of skewness and kurtosis, exceeding the cutoffs of -/+ 1.00 (Meyers et al., 2016). Specifically, job engagement (-1.423), commitment (-1.647), and job satisfaction (-1.380) exceeded the cutoff for skewness. Job embeddedness (1.030), job engagement (1.859), commitment (3.629), and job satisfaction (1.815) exceeded the cutoff for kurtosis.

Following prior research, I created composite scores for job embeddedness, job engagement, commitment, job satisfaction, and job alternatives. I screened the data for univariate and multivariate outliers. *Z*-scores were used to identify univariate outliers and Mahalanobis distance was used to identify multivariate outliers. Following Meyers et al. (2016), I used Raykov and Marcoulides' (2008) guidelines of -/+3.0 for extreme outliers. Nine univariate outliers were detected, with values ranging from -4.402 to -3.021 (none were above +3.0). When I calculated Mahalanobis distances, any value past 20.515 based on 5 degrees of freedom is considered an outlier, based on the *Table of Critical Values* for chi square at a stringent alpha level of p <.001 (Meyers et al., 2016). Two cases were beyond the recommended cutoffs and one of those was also identified as a univariate outlier. In total, 10 cases were identified as outliers. When I removed these 10 outliers from the data, the scores appeared to be multivariate and univariate normal. The univariate Q-Q plots of the variables job embeddedness, job engagement, commitment, and job satisfaction were more normally distributed. The removal of the 10 outliers improved the skewness and kurtosis scores, such that all scores, with the exception of job engagement's skewness, fell within the cutoff of -/+1. The skewness score of job engagement was -1.085. Because the Q-Q plot approximated closer to normal, this level of skewness of job engagement was accepted.

Collinearity was tested by analyzing the collinearity statistics – tolerance and variance inflation factor (VIF). The tolerance scores for job engagement (.327), commitment (.358), and job satisfaction (.263) were less than .40, which indicates the scores on these variables should be inspected. The scores were not below .10 which would indicate a severe collinearity problem (Meyers et al., 2016). The VIF scores for job engagement (3.060), commitment (2.791), and job satisfaction (3.807) were above the 2.5, which indicates the scores on these variables should be inspected. The scores were not above 10 which would indicate a severe collinearity problem (Meyers et al., 2016). When I removed the 10 outliers discussed above from the data, the tolerance and VIF scores improved. The tolerance score for job engagement moved above the .40 cutoff and the VIF score moved below the 2.5 cutoff. The tolerance scores for commitment and job satisfaction did not move above the .40 cutoff and the VIF scores did not move below the 2.5 cutoff. While this would indicate that there is multicollinearity between these variables, the scores do not suggest severe correlation and commitment and job satisfaction are not the focal variables in this study. Thus, additional steps were not taken to address the moderate collinearity issue. Based on the improvement in normality and collinearity indices, I removed the 10 outlier cases from my subsequent analysis and my resulting sample size is N = 126, as shown in Table 1.

Table 1: Participant Selection and Removal Criteria

	N	%
Total Surveys Received	**197**	
Non-Valid Participants	**71**	
Did Not Consent	3	4
Opened but did not answer questions	41	58
Did not answer beyond demographic questions	11	15
Did not answer JEM or JEN questions	6	9
Outliers	10	14
Valid Participants	**126**	

Note. JEM is job embeddedness and JEN is job engagement.

After data screening was complete, I examined the quantitative data for statistically significant relationships using correlational and regression analyses.

> ***H_{1a}:*** *Employees in smaller public accounting firms will have higher levels of job embeddedness than those employees in larger accounting firms.*

To test hypothesis H_{1a}, a linear regression was conducted to examine the size characteristic of public accounting firms as a predictor of employees' levels of job embeddedness. The data met the assumptions of linearity, homoscedasticity, and normality of residuals based on a review of plots of standardized residuals against standardized predicted values.

> ***H_{1b}:*** *Employees in smaller public accounting firms will have higher levels of job engagement than those employees in larger accounting firms.*

To test hypothesis H_{1b}, a linear regression was conducted to examine the size characteristic of public accounting firms as a predictor of employees' levels of job engagement. The data met the assumptions of linearity, homoscedasticity, and normality of residuals based on a review of plots of standardized residuals against standardized predicted values.

> ***H_2:*** *An individual's level of job embeddedness is negatively related to turnover intentions.*

> ***H_3:*** *An individual's level of job engagement is negatively related to turnover intentions.*

To test hypotheses H_2 and H_3, I conducted multiple regression to examine the relationship between job embeddedness, job engagement, and turnover intentions, controlling for size of firm, commitment, job satisfaction, job alternatives.

Summary

Chapter 3 provided the research method, including the research design, data collection, instruments and measures, and data diagnostics and analysis, used in this study. Chapter 4 presents detailed results and chapter 5 presents a discussion of the results, implications for management, limitations, and future research.

Chapter 4: Results

This chapter presents the results of the study. It is organized into three sections: a discussion of survey participants, testing of the hypotheses, and a summary. To examine hypotheses H_{1a}, H_{1b}, H_2, and H_3, regression analysis was used to test the hypothesized relationship between the size of firm, job embeddedness, job engagement and turnover intentions of full-time accounting professionals of public accounting firms.

Participants

The survey was open from August 25 to November 27, 2023. Of the 197 participants who opened the survey, 61 were excluded from the data for not answering any of the questions or any questions past the demographic questions, leaving 136 responses before data cleaning. As shown in Table 2, the sample of responses represent a wide swath of the profession, including all levels of position and designation. Of the responses, 42.6% female and 57.4% male with the largest percentage aged between 30-39 (32.4%). Other ages were 20-29 (13.2%), 40-49 (19.1%), 50-59 (13.2%), 60-69 (10.3%), 70 and older (4.4%) and not reported were 7.4%. With regards to position and designation, 14.7% of the respondents were staff, 22.8% were seniors, 11.8% were managers, and 50.7% were partners; 63.2% of the respondents were CPAs and 18.4% held both their CPA license and an "other" credential. One objective of the survey was to have responses from all levels in a public accounting firm and based on the spread of the percentages for each position, this objective was met. The percentage of partners who participated in the survey, over 50%, could create bias, as they are the people in the firm who have the most control over factors that could influence job embeddedness or job engagement. This potential bias is discussed more in the limitations section of chapter 5.

The majority of respondents held an undergraduate degree (58.8%), with 38.2% earning a master's degree and 2.2% earning a high school degree (.7% not reported). The number of full-time professionals in the office ranged between 2-10 employees (35.3%), 11-20 employees (21.3%), and 21 or more employees (36.8%) (4.4% had 0-1 professional employees and 2.2% did not report). These size groups are based on the AICPA classification of small firm (2-10 employees), medium firm (11-20 employees), and large (21 or more employees). Another objective of the survey was to obtain responses from firms of all sizes. The distribution of participants between small, medium, and large firms met that objective. The survey asked how many offices were in the firm: 57.4% had only one office in the firm and 40.4% had 2 or more offices (2.2% did not report). The majority of the respondents (41.2%) had worked at only one public accounting firm, including the current firm at which they worked, 27.9% had worked at 2 firms, 12.5% at 3 firms, 9.6% at 4 firms, 2.9% at 5 firms, and 5.1% at more than 5 firms (.7% not reported). The length of time the respondents at worked at their current firm ranged from 0 to 5 years (41.2%), 6 to 10 years (21.3%), 11 to 15 years (13.2%), 16 to 20 years (8.8%), 21 to 25 years (5.9%), and more than 25 years (9.6%). The spread of all of the responses is representative of the profession, without one category far outweighing another.

Table 2: Participant Demographics, Frequencies, and Percentages

	(N=136)	Percentage	Average
Gender			
Female	58	42.6	
Male	78	57.4	
Non-binary	--		
None of the above, please specify	--		
Not reported	--		
Age (in years)			
20 to 29	18	13.2	
30 to 39	44	32.4	
40 to 49	26	19.1	
50 to 59	18	13.2	
60 to 69	14	10.3	
70 and older	6	4.4	
Not reported	10	7.4	
Average Age			43
Number of Full-time Professionals in the Office			
0-1 Employees	6	4.4	
2-10 Employees	48	35.3	
11-20 Employees	29	21.3	
21 or more Employees	50	36.8	
Not Reported	3	2.2	
Average Number of FT Professionals			55
Number of Offices in the Firm			
1 office	78	57.4	
2 or more offices	55	40.4	
Not Reported	3	2.2	
Position			
Staff	20	14.7	
Senior	31	22.8	
Manager	16	11.8	
Senior Manager/Director	0	0.0	
Partner/Principal	69	50.7	
Years Working as a Professional in An Accounting Firm			
0 to 5 years	24	17.6	
6 to 10 years	33	24.3	
11 to 15 years	19	14	
16 to 20 years	24	17.6	
21 to 25 years	9	6.6	
More than 25 years	27	19.9	
Number of Firms Participant Has Worked For, Including Current Firm			
1 Firm	56	41.2	
2 Firms	38	27.9	
3 Firms	17	12.5	
4 Firms	13	9.6	
5 Firms	4	2.9	
More than 5 Firms	7	5.1	
Not Reported	1	0.7	

	(N=136)	Percentage	Average
Length of Time Working at Current Firm (in years)			
0 to 5 years	56	41.2	
6 to 10 years	29	21.3	
11 to 15 years	18	13.2	
16 to 20 years	12	8.8	
21 to 25 years	8	5.9	
More than 25 years	13	9.6	
Average			11
Highest Degree Obtained			
Undergraduate	80	58.8	
Masters	52	38.2	
Other	3	2.2	
Not Reported	1	0.7	
Credentials/Designations Held			
CPA	86	63.2	
JD	0	0.0	
EA	1	0.7	
Other	2	1.5	
None	22	16.2	
CPA, Other	25	18.4	

Testing of Hypotheses

IBM SPSS Statistics version 27 was used to analyze the survey data. Three models with variables size of firm, job embeddedness, job engagement, and turnover intentions were tested using simple and multiple regression analyses. This study hypothesized that the size of firm would predict levels of job embeddedness and levels of job engagement in full-time professionals in public accounting firms and job embeddedness and job engagement would predict turnover intentions. Prior to conducting regression analyses, the statistical assumptions of normality, linearity, and homoscedasticity were examined. If one of these assumptions are violated, study results may be biased (Field, 2018; Meyers et al., 2016), which means my interpretation of the results could be biased. Because the assumptions were met, I can assume my interpretation results are independent and free from bias.

Linearity, Homoscedascity, and Normality

Regression analysis assumes that variables in a study are related to each other in a linear fashion (Meyers et al., 2016). Homoscedascity assumes that the variance of the dependent variable will remain stable across levels of the independent variable (Field, 2018; Meyers et al., 2016). Normality affects the accuracy of confidence intervals, the significance testing of models, and the optimization of the estimates of the model parameters (Field, 2018). These assumptions were tested with scatterplots and plots of standardized residuals against standardized predicted values. The plots for firm size and job embeddedness and for firm size and job engagement showed the data met the assumptions of linearity, homoscedasticity, and normality.

Correlations

Pearson, or zero-order, correlation coefficients were computed among the number of full-time accounting professionals working in the participant's office and the six variables of job embeddedness, job engagement, turnover intentions, commitment, job satisfaction, and job alternatives. The three survey items use for turnover intentions asked about the participant's intention to stay with the firm, not intention to leave the firm. As employees experience higher levels of job embeddedness and job engagement, their intentions to stay with the firm are greater. The two survey items used for job alternatives asked about the probability of finding an acceptable alternative to the current job and the chances of finding that acceptable alternative in the next year. As employees experience higher levels of job embeddedness and job engagement, their chances of finding an acceptable alternative decrease. The magnitude of the correlation coefficients between variables were examined following Cohen's (1988) guidelines: .1 small/weak, .3 moderate, and .5 large/strong. As shown in Table 2, the size of the firm, measured by the number of full-time accounting professionals working in the participant's office, had a weak, significant relationship with job embeddedness $r = .185$, $p < .05$. The correlation coefficient squared, $R^2 = .03$, suggests that the size of firm shares 3% of the variance in job embeddedness. The size of firm did not correlate with job engagement ($r = .119$, $p = .186$) or the three control variables, commitment ($r = .089$, $p = .320$), job satisfaction ($r = .164$, $p = .066$), and job alternatives ($r = -.073$, $p = .419$).

However, when analyzing correlations between the six quantitative variables, the results indicate that the relationships between these variables were significant and in the predicted directions. The bivariate correlation between job embeddedness and turnover intentions, $r = .514$, $p < .001$, was strong and significant. The correlation coefficient squared, $R^2 = .26$, suggests that job embeddedness shares 26% of the variance in turnover intentions. The bivariate correlation between job engagement and turnover intentions, $r = .285$, $p = .001$, was moderate and significant. The correlation coefficient squared, $R^2 = .08$, suggests that job engagement shares 8% of the variance in turnover intentions. The three survey items use for turnover intentions asked about the participant's intention to stay with the firm, not intention to leave the firm. Thus, employees with high levels of job embeddedness and job engagement have higher intentions of staying at their current firm.

Job embeddedness was positively and significantly correlated with commitment ($r = .541$, $p < .001$) and job satisfaction ($r = .518$, $p < .001$). It was negatively and significantly correlated with job alternatives ($r = -.295$, $p < .001$). Job engagement was positively and significantly correlated with commitment ($r = .583$, $p < .001$) and job satisfaction ($r = .686$, $p < .001$). It was negatively and significantly correlated with job alternatives (r = -.218, p = .015). The survey items used to assess job alternatives asked participants what they perceived as the probability of finding an acceptable alternative job. As employees experience higher levels of job embeddedness and job engagement, their chances of finding an acceptable alternative decrease.

Table 3: Pearson's Correlations for Size, Turnover Intentions, Job Embeddedness, Job Engagement, Commitment, Job Satisfaction, and Job Alternatives

Variable	*n*	*M*	*SD*	1	2	3	4	5	6	7
1. FTP	126	32.9	221.14	-						
2.TOINT	126	6.34	1.04	.009						
3. JEM	126	5.94	.69	.185*	.514***	-				
4. JEN	126	5.77	.94	.119	.285*	.384***	-			
5. COM	126	5.96	.82	.089	.519***	.541***	.583***	-		
6. JSAT	126	5.98	.91	.164	.477***	.518***	.686***	.767***	-	
7. JALT	125	5.16	1.95	-.073	-.357***	-.295***	-.218***	-.337***	-.317***	-

Note. *p < .05. **p < .01*** p < .001. FTP is number of full-time accounting professionals in the office. TOINT is turnover intentions. JEM is job embeddedness. JEN is job engagement. COM is commitment. JSAT is job satisfaction. JALT is job alternatives.

In order to understand the relationships between size of firm, job embeddedness, job engagement, and turnover intentions, while controlling for commitment, job satisfaction, and job alternatives, a partial correlation was conducted to adjust for the effects of the three control variables. Table 4 shows the partial correlation results. These results of the partial correlation show no correlation between size of firm and job embeddedness (r =.138, p = .128), job engagement (r =.02, p = .864), or turnover intentions (r =-.08, p = .411). There is a small, positive, and statistically significant partial correlation between job embeddedness and turnover intentions, r = .286, p = .001, while controlling for commitment, job satisfaction, and job alternatives. However, compared to the Pearson's correlation between job embeddedness and turnover intentions presented above the relationship has diminished between those variables when three control variables are removed from the analysis. In the partial correlation, job embeddedness shares 8% (r

= .286, R^2 = .08) of the variance in turnover intentions, that is left over by commitment, job satisfaction, and job alternatives, compared to the 26% (r = .511, R^2 = .26) when the three controlling variables are included in the analysis.

Results of the partial correlation indicated a non-significant, weak negative partial correlation between job engagement and turnover intentions, r = -.101, p = .269, while controlling for commitment, job satisfaction, and job alternatives. Including the control variables switched the direction and significance of the relationship between job engagement and turnover intentions. As stated above, when the Pearson's correlation between job engagement and turnover intentions was calculated, there was a positive, statistically significant relationship between job engagement and turnover intentions, r = .284, p = .001. This positive correlation, when commitment, job satisfaction, and job alternatives are not controlled for, suggests that the control variables influence the relationship between job engagement and turnover intentions. In the partial correlation, job engagement does not influence turnover intentions, controlling for commitment, job satisfaction, and job alternatives, compared to the 8% (r = .284, R^2 = .08) of variance when the three controlling variables were not controlled for.

Table 4: Partial Correlation with Control Variables, Commitment, Job Satisfaction, and Job Alternatives

Variable	*n*	*M*	*SD*	1	2	3	4
1. FTP	126	32.90	221.14	-			
2. TOINT	126	6.34	1.04	-.08	-		
3. JEM	126	5.94	.69	.14	.29***	-	
4. JEN	126	5.77	.95	.02	-.10	.02	-

Note. *p < .05. **p < .01*** p < .001. FTP is number of full-time accounting professionals in the office. TOINT is turnover intentions. JEM is job embeddedness. JEN is job engagement.

Regression Models

The research methodology consisted of estimating three regression models using a sample of full-time accounting professionals working in CPA firms.

Model 1

Hypothesis H_{1a} hypothesized that the level of full-time accounting professionals' job embeddedness would be higher in smaller firms than larger firms. Hypothesis H_{1b} hypothesized that the level of full-time accounting professionals' job engagement would be higher in smaller firms than larger firms. The number of full-time professionals in the firm and the composite scores of job embeddedness and job engagement were used.

To test hypothesis H_{1a}, a linear regression, model 1, was conducted to examine if the size of a public accounting firm was a predictor of employees' levels of job embeddedness. Regression model 1 was estimated as follows:

$$JEM_i = B_0 + BFTP_1$$

The dependent variable was job embeddedness (JEM) The independent variable was the number of full-time accounting professionals in the office (FTP). Hypothesis H_{1a} was supported by the model. Table 5 shows the regression coefficients for model 1. There is a relationship between the size of firm and job embeddedness but not in the predicted direction. The prediction model for model 1 was statistically significant $F(1, 124) = 4.408$, $p < .05$, and accounted for approximately 3% of the variance of job embeddedness ($R^2 = .034$, adjusted $R^2 = .027$). Size of firm was a moderate predictor of job embeddedness.

Table 5: Regression Coefficients of Size of Firm on Job Embeddedness

Model 1						
Variables	***B***	**β**	***SE***	***p***	***R²***	***Adjusted R²***
Constant	5.93		.06		.034	.027
FTP	.001	.19	.00	.038*		

Note. *p < .05. **p < .01*** p < .001. N = 126. FTP is number of full-time accounting professionals in the office. I examined the impact of size of firm on job embeddedness.

Model 2

To test hypothesis H_{1b}, a linear regression, model 2, was conducted to examine if the size of a public accounting firm was a predictor of employees' levels of job engagement (JEN). Regression model 2 was estimated as follows:

$$JEN_i = B_0 + BFTP_1$$

The dependent variable was job engagement (JEN). The independent variable was the number of full-time accounting professionals in the firm (FTP). Table 6 shows the regression coefficients for model 2. Hypothesis H_{1b} was not supported by model 2. The prediction model for model 2 was not statistically significant $F(1, 124) = 1.771$, $p = .186$, and accounted for approximately 1% of the variance of job engagement ($R^2 = .014$, adjusted $R^2 = .006$). Size of firm was not a significant predictor of job engagement.

Table 6: Regression Coefficients of Size of Firm on Job Engagement

Model 2						
Variables	*B*	β	*SE*	*p*	*R²*	*Adjusted R²*
Constant	5.78		.22		.014	.006
FTP	.001	.119	.00	.186		

Note. *p < .05. **p < .01*** p < .001. N = 126. FTP is number of full-time accounting professionals in the office. I examined the impact of size of firm on job engagement.

Model 3

To test hypotheses H_2 and H_3, multiple regression, model 3, was conducted to examine if job embeddedness and job engagement predicted turnover intentions of full-time accounting professionals. Model 3 was estimated as follows:

$$TOINT_i = B_0 + B_1 FTP_i + B_2 COMM_i + B_3 JSAT_i + B_4 JALT_i + B_5 JEM_i + B_6 JEN_i + e_i$$

The dependent variable was turnover intentions (TOINT). The independent variables in Model 3, used to test the second and third hypotheses, were job embeddedness (JEM), job engagement (JEN), and size of firm (FTP). Control variables for this regression included commitment (COMM), job satisfaction (JSAT), and job alternatives (JALT). The number of full-time professionals in the firm and the composite scores of job embeddedness, job engagement, commitment, job satisfaction, and job alternatives were used to estimate the regression model. Table 7 shows the multiple regression results for model 3. Hypothesis H_2 was supported by this model. Hypothesis H_3 was not supported by this model. The prediction model for model 3 is statistically significant, $F(6,118) = 12.495$, $p < .001$, and accounted for approximately 39% of the variance of turnover intention ($R^2 = .388$, adjusted $R^2 = .357$). In this model, higher levels of job embeddedness ($\beta = .306$, $p < .001$) and to a lesser extent, commitment ($\beta = .235$, $p < .05$) and job alternatives ($\beta = -.162$, $p < .05$), primarily predicted turnover intentions. Job engagement ($\beta = -.120$, $p = .232$), size of firm ($\beta = -.097$, $p = .191$), job satisfaction ($\beta = .184$, $p = .156$) do not predict turnover intentions in this model. Job embeddedness was a significant predictor of turnover intentions. Job engagement was not a significant predictor of turnover intentions.

Table 7: Results of Multiple Regression of Job Embeddedness and Job Engagement on Turnover Intentions

Variable	*B*	*SE*	β	95% CI *LL*	95% CI *UL*	*p*
JEM	.46	.13	.31	.197	.724	.001***
JEN	-.13	.11	-.12	-.349	.085	.232
FTP	.00	.00	-.10	-.001	.000	.191
COM	.30	.15	.24	.006	.598	.049*
JSAT	.21	.15	.18	-.082	.505	.156
JALT	-.09	.04	-.16	-.168	-.005	.038*

Note. $*p < .05$. $**p < .01***$ $p < .001$. N = 125. CI = confidence interval; *LL* = lower limit; *UL* = upper limit. TOINT is turnover intentions. JEM is job embeddedness. JEN is job engagement. FTP is number of full-time accounting professionals in the office. COM is commitment. JSAT is job satisfaction. JALT is job alternatives.

Summary

The study results partially support the proposed hypotheses. Job embeddedness does significantly predict turnover intentions of full-time accounting professionals in public accounting firms. The size of the firm did predict the levels of job embeddedness but did not predict the levels of job engagement of full-time accounting professionals. Job engagement did not predict turnover intentions of full-time accounting professionals in public accounting firms. Chapter 5 discusses the findings, practical and theoretical implications, limitations of the current study, and recommendations for future research the study.

Ch 5: Discussion

Chapter 5 provides a summary of the study, discussion of the findings, practical and theoretical implications, limitations of the current study and recommendations for future research the study, and a summary.

Summary of the Study

This study is the first to test the impact of size on job embeddedness and job engagement and the impact of job embeddedness and job engagement on turnover intentions of full-time accounting professionals of public accounting firms. Public accounting firms in the U.S. continue to state that retaining qualified Certified Public Accountants (CPAs) is a current top ten concern and will be an issue that will have the most impact on their practice in the next five years (AICPA, 2021). Retention is a key strategy not unique to public accounting firms. For the past couple of years, the workforce is experiencing the “Great Resignation”, a phenomenon of millions of employees quitting their jobs each month. Kane (2021) found that stress, burnout, dissatisfaction, and lack of work-life balance are several factors propelling the Great Resignation. A *Journal of Accountancy* article published in 2020 discussed retention strategies used by CPA firm leaders and the list included managing burnout, offering flexibility, reducing overtime hours, training, and leading by example (Knopf, 2020). A 2020 survey found the average staff turnover rate in public accounting firms was 13.7% (INSIDE Public Accounting, 2020). Factors, such as the cost of turnover, both monetary and non-monetary; the potential negative impact of turnover on audit quality; the decrease in accounting enrollment and graduation; the Great Resignation; and changes to work environments due to the pandemic – elevates what was already a serious problem into a critical problem for the accounting profession.

Job embeddedness is characterized by the numerous ties an employee has with his or her organization and community (Mitchell et al., 2001). The more "stuck" an employee is, both within the organization and the community, the harder it is to leave the organization. Schaufeli et al. (2002) define engagement as a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p.74). Many of the factors that influence job embeddedness and job engagement fall under the control of firm management. However, the size of the firm may impact the autonomy and flexibility managers/partners have in managing these factors. To help public accounting firms address retention concerns, there were two overarching research questions that guided the direction of this study: (a) how does the size of a public accounting firm impact their employees' levels of job embeddedness and job engagement and (b) do increased levels of job embeddedness and job engagement influence a public accounting firm employees' turnover intention? Four hypotheses were tested to examine these two questions:

H_{1a}: Employees in smaller public accounting firms will have higher levels of job embeddedness than those employees in larger accounting firms.

H_{1b}: Employees in smaller public accounting firms will have higher levels of job engagement than those employees in larger accounting firms.

H_2: An individual's level of job embeddedness is negatively related to turnover intentions.

H_3: An individual's level of job engagement is negatively related to turnover intentions.

The theoretical framework of the study was based on a review of prior literature on turnover intentions, size of firm, job embeddedness, and job engagement. A survey of demographic questions and Likert-scale instruments, tested in prior literature, was used to investigate the relationship between the variables. Simple and multiple regression analyses were conducted to examine the four hypotheses and to test the hypothesized model.

Results suggested there is a significant relationship between the size of a public accounting firm and job embeddedness. Job embeddedness was found to significantly predict of turnover intentions. Contrary to the predicted models, the results did not provide sufficient evidence that there is a statistically significant predictive relationship between size of public accounting firm and job engagement nor between job engagement and turnover intentions.

Discussion of Findings

This section discusses the results of each hypothesis tested. The findings suggest that there are statistically significant predictive relationships between some of the variables, but not with all the variables. First, hypotheses H_{1a} and H_{1b} are discussed, followed by discussions of hypotheses H_2 and H_3.

Hypothesis 1_a and Hypothesis 1_b

The first two hypotheses stated there would be a relationship between size of firm and employees' levels of job embeddedness and job engagement. Hypothesis H_{1a} stated employees in smaller public accounting firms would have higher levels of job embeddedness than those employees in large public accounting firms. Results (Model 1) show there was a predictive relationship between the size of a public accounting firm an employee's level of job embeddedness. However, the results do not support the hypothesis that employees in smaller public accounting firms have higher levels of job embeddedness. In this study, results suggest that has the size of the firm increases, job embeddedness increases by a small increment. While the findings show there is a relationship between size of firm and job embeddedness, it is not in the predicted direction. Hypothesis H_{1a} was not supported; thus, the null hypothesis was accepted.

I hypothesized (H_{1b}) but did not find support for the statement that employees in smaller public accounting firms would have higher levels of job engagement than those employees in larger public accounting firms. Results of the analysis (Model 2) did not present evidence that size of a public accounting firm predicts levels of job engagement, in small or large firms. Hypothesis H_{1b} was not supported; thus, the null hypothesis was accepted.

Studies in the area of size of organization and its relationships with HRM practices have been numerous. Smaller organizations tend to have HRM practices that are more likely to be informal, flexible, and undocumented (De Kok & Uhlaner, 2001; Jackson et al., 1989; Storey et al., 2010). When workplace size increases, formality increases and self-reported job quality decreases (Storey et al., 2010). Employees in larger organizations have less job autonomy than their colleagues in smaller organizations (Kalleberg & Van Buren, 1996). Smaller organizations have organizational flexibility that large firms do not have (van der Weerdt et al., 2006). Neither job embeddedness nor job engagement are specific HRM practices; yet, HRM procedures and practices implemented by firm management, such as flexibility, task variance, job crafting, can increase an employee's sense of being embedded in their firm and community. While the results did not support that employees in smaller firms have higher levels of job embeddedness, they do suggest a predictor relationship between size and job embeddedness that can be further explored by future research.

This study is unique in that is the first to analyze the variables of job embeddedness, job engagement, and size of organizations within the public accounting firm context. Several studies have included the variables of job embeddedness, work engagement, and size of organizations (Coetzer et al., 2017; Coetzer et al., 2019; Susomrith & Coetzer, 2019;); however, none of these studies looked specifically at public accounting firms. Coetzer et al. (2017) suggested job embeddedness predicted turnover intentions in large organizations but not in small organizations. Their study focused on the on-the-job embeddedness dimensions of links, fit, and sacrifice and did not include the off-the-the job (community) embeddedness dimensions of links, fit, and sacrifice. While their results did not show that job embeddedness was a predictor of turnover intentions in smaller firms, they did find evidence that employees of smaller firms perceived greater organizational sacrifice and a better fit with their organization than those employees of larger firms. The current study differs from and extends the study by Coetzer et al. (2017). This study used the global composite score of job embeddedness and did not analyze the six different dimensions of job embeddedness as a result of size of firm or as a predictor of turnover intentions. Additionally, in the present study, results showed the size of public accounting firm predicts job embeddedness but not that employees in smaller firms have higher levels of job embeddedness than their colleagues in larger firms.

While the findings do not support hypothesis H_{1a}, specifically the distinction in levels of job embeddedness at small firms and large firms, the results are important. Interaction between size and job embeddedness have only been analyzed in a few studies and not within the accounting profession. Coetzer et al. (2017) examined the relationship between job embeddedness and turnover intentions within the context of small and large firms. They did not investigate if size predicts higher levels of job embeddedness. Participants in the Coetzer et al. (2019) study were employees working in small to medium enterprises in Australia and South Africa. Developing on-the-job embeddedness does reduce turnover intentions (Coetzer et al., 2019). (Similar to an earlier study by Coetzer et al. (2017), the three subdimensions of off-the-job embeddedness were not included in the study). Susomrith and Coetzer (2019) analyzed the relationship between size and job engagement by examining informal learning practices in small professional service organizations. They found that informal training and learning programs in small firms are positively related to work engagement (Susomrith & Coetzer, 2019). They did not investigate if employees in small organizations had higher levels of job engagement, just engagement within small firm context.

Hypothesis 2

Hypothesis H_2 stated job embeddedness would predict turnover intentions, when controlling for commitment, job satisfaction, and job alternatives. Results (Model 3) from the multiple regression analysis present evidence that job embeddedness does predict turnover intentions. Thus, hypothesis H_2 was supported and the null hypothesis was rejected. The findings are consistent with prior research and add support to the literature on turnover intentions and job embeddedness by providing evidence that job embeddedness is a predictor of turnover intentions (Coetzer et al., 2017, Coetzer et al., 2019; Cunningham et al., 2005; Mitchell et al., 2001; Takiwara et al., 2014). This finding contributes to the literature on turnover intentions in the accounting profession by adding the job embeddedness construct as a predictor of turnover intentions for employees working in public accounting firms.

Full-time professionals in public accounting firms who have strong, respectful working relationships with their colleagues and their clients and/or have strong ties with their community are more likely to stay with their firms. Those who feel their talents and skills are utilized and appreciated by their firm and who enjoy the community in which they live are less likely to leave their firm. High perceptions of loss if leaving the firm and the community contribute to the professionals' desire to stay with their firm.

Hypothesis 3

Hypothesis H_3 stated job engagement would predict turnover intentions, when controlling for commitment, job satisfaction, and job alternatives. Results (Model 3) from the multiple regression analysis present evidence that job engagement does not predict turnover intentions. Thus, hypothesis H_3 was not supported. This finding is inconsistent with current research (Saks, 2006; Saks, 2019; Schaufeli & Bakker, 2004; Shuck, 2011; Shuck et al., 2011; Vermooten et al., 2019). Schaufeli et al. (2002) define work engagement as a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p.74). Vigor is the level of energy and mental resilience while working, the willingness to invest in work, and persistence with work tasks. Dedication is the level of involvement with one's work and the sense of significance, pride, challenge, and inspiration. Absorption is the level of full concentration and how engrossed one is with the work, the extent it is hard to detach from the work task, and times passes quickly. Positive engagement environments and increased job resources increase engagement (Albrecht et al., 2018). Job crafting improves meaningful work (Wrzensniewski & Dutton, 2001), which has been associated with increased levels of employee engagement (Vermooten et al., 2019). Increased levels of engagement created by meaningful work reduce employees' turnover intentions. Those employees who perceive they have required resources (physical, emotional, psychological) necessary to complete their work have higher levels of engagement and lower intentions to leave (Shuck, 2011). When analyzing engagement as a predictor of job performance, Christian et al.'s conceptual framework (2011) listed these job characteristics as antecedents of engagement: autonomy, task variety, task significance, problem solving, job complexity, feedback, social support, physical demands, and work conditions.

The inconsistency of these findings with prior research could stem from several reasons. First, the nature of the work in public accounting firms varies across the different services lines, i.e., auditing, tax, consulting, or other. It may be hard for tax accountants in a public accounting firm to feel a sense of dedication and pride in their work if their daily tasks with regards to tax return preparation are repetitive or uninspiring. For auditors, perhaps working at a client's office for long periods of time does not lend to inspiring and fulfilling work. Second, all professionals in public accounting firms are subject to tight deadlines and long hours throughout different times of the year. The required long hours in condensed periods of time might hamper levels of energy and resilience. Time might pass quickly, and professionals feel absorbed in their work but long days and less time off sap energy levels and diminish a professional's level of vigor. Third, the regulatory environment of the public accounting profession means that rules, principles, and laws are constantly changing, and the knowledge required to correctly apply the changes increases. The speed of the change with the increase in required knowledge may not lead to a positive work environment but rather one in which professionals feel overwhelmed and incapable of mastering the new rules, principles, and laws.

Practical and Theoretical Implications

Practical implications

Based on these findings, public accounting firm management looking to improve retention in their firms should implement strategies to increase their employees' embeddedness in the organization and the community by focusing, with intention, on the six dimensions of job embeddedness: organization fit, links, sacrifice and community fit, links, sacrifice. Understanding that their employees are more inclined to stay at their firm when they experience higher levels of job embeddedness is a key insight for an alternate strategy to retain employees. Compensation and benefits are always going to be a factor in the retention debate and is a factor that each firm has to analyze based on their firm's situation, the client base, and the employees. This study provides firm management with areas of focus that should be a part of the discussion of HRM practices in the firm. Many of the suggestions below are used in practice. For those firms who are implementing many of the suggestions below, the results of this study give firm management empirical evidence supporting the why behind the success of the techniques. If firms are not implementing some of these practices, these results provide the empirical evidence of why they should consider implementing the practices. An important piece for firm management to remember is that an employee's level of embeddedness or engagement is unique to the firm and to the employee. The practices that are successful for one firm may not be successful for another firm. What strategies work to embed or engage one employee may not work for another employee. Recognizing the individuality of the constructs is key for management as they decide on different strategies and policies.

In addition to the demographic questions and the Likert-scale questions for the six quantitative variables of job embeddedness, job engagement, turnover intentions, commitment, job satisfaction, and job alternatives, participants were asked to pick from a list of 13 aspects or characteristics they liked best about their firm. They could pick all responses that applied. The last question was "Other" with space to provide additional aspects they liked that were not listed. The characteristics chosen for the question were based on characteristics of job embeddedness and job engagement listed in prior literature. Table 7 lists the aspects and the percentage of how many participants picked each aspect. "Other" responses include maternal support for new mothers, such as accommodations for breastfeeding, paid maternity leave, and flexibility; ownership that allows carefully choosing and screening clients and control over software, processes, procedures, systems, strategic direction, CPE selection; paid overtime; and being able to make positive change.

Table 8: Firm Aspects with Percentages

	%
Flexibility of hours	76
Respectful relationships with your colleagues and your clients	76
Flexibility of work arrangement (office, from home, hybrid)	70
Compensation and benefits	66
Autonomy to work on your projects and tasks	64
Variety in projects and types of clients	62
Work-life balance	57
Availability of managers and partners to meet with and discuss your needs	47
Learning and development opportunities	47
Support from managers and partners to get involved in your community	34
Performance appraisal and feedback procedures	17
Childcare options	2
Other	

Note. N = 135

Links are the relationships the employees have with other people and institutions, both in the community and the organization (Mitchell et al., 2001). In a public accounting firm, employees have two overall types of work relationships: those with their colleagues and those with their clients. In mass media, there is at least one article published a year on how firms can bring fun to busy season and how to host a variety of social activities for employees. Fun for fun's sake is great but understanding why encouraging respectful, collaborative relationships in the firm can increase the ties employee feels with the firm is of greater importance. When answering the last question in the survey, 76% of participants indicated that respectful relationships between their colleagues and clients were aspects they liked best about their firm. Firm management should focus on strategies that increase these types of relationships. Finding and utilizing practices to build cohesion that works specifically with the firm's employees can strengthen the links between employees. Hosting events that are family friendly where employees are encouraged to bring families can have a double benefit of supporting links both in and out of the firm. A focus on employee and client relationships requires a different strategy. Clients provide a firm's revenue and the decision to fire a client is not a decision taken lightly by firm management. Anyone who takes a look at the #TaxTwitter on the social media platform, Twitter, will find a common discussion around firing clients who are disrespectful to firm employees and who are unreasonably demanding. Reviewing the client list, identifying those clients who create problems, and taking steps to minimize the friction with employees, whether that is firing the client or assigning to another employees, are steps firm management can take to strengthen the links their employees have with their firm.

Managers and partners in public accounting firms are in a unique position to help their employees develop links in the community. They tend to know many people in the community through their work with their clients and have strong ties to community businesses and enterprises. For those employees they manage, managers and partners can be a conduit for their employees who want to get more invested in the community. Introductions to different people and businesses in the community give their employees exposure to those areas they might be interested in exploring more, thus strengthening their links in the community. Supporting employees' participation in community organizations, by either paying membership fees or allowing paid off time, is one practice firm management can implement.

The fit dimension of job embeddedness is also both internal and external. Internally, fit relates to the alignment of the employee's values and career goals with their firm's culture, requirements, and demands of the job. Externally, fit applies to the community and how an individual feels connected to his or her community (Mitchell et al., 2001). Job embeddedness increases when employees' abilities and professional interests are matched with their organization and when they believe they fit in the community (Coetzer et al., 2017). The empirical evidence supports the general statement that fit is incredibly important for employees and employers and should be a consideration starting from the beginning of the interview process and continuing while the employee is with the firm. Intentionally crafting interview questions that relate specifically to the culture of the firm could give managers and partners early insight into how a potential employee might fit with the firm. Employers might organize in-office interviews so that current employees have opportunities to meet and visit with a potential candidate, obtain their feedback on the potential fit with the candidate and the firm, and be open to that feedback. Once employees are hired, firm management can start cementing that fit on the employee's first day of employment with a well-designed onboarding process that highlights the firm's mission and vision and intentionally pairs the new employee with others who can help foster and develop the new employee. An approach for establishing fit unique to public accounting firms is for firm management to encourage and support new employees to obtain their CPA license. The process of obtaining the CPA license is difficult, lengthy, and requires a significant monetary and time commitment from the employees. Employees who know they are fully supported, both monetarily and with time off, and are able to obtain their CPA license may have a great sense of fit with their firm. Allowing certified employees a choice in their continuing education classes, in order to pick those classes that interest them and support their professional growth, may lead them to feel they have a greater fit with their firm.

Participants highlighted the importance of learning and development opportunities, with 47% of them picking that aspect as one they liked best about their firm.

Fit within the organization should be continuously monitored by managers and partners. Each employee has their unique strengths, needs, and weaknesses and attempts to increase fit work differently with different types of personalities. Finding a way to capitalize on the strengths of each employee, understanding their needs, and aligning them with the firm's client base is one approach firm management can take to increase a better perception of fit. For example, firms can invite a consultant who would work with employees to help them recognize their strengths and understand how those strengths contribute to the success of the firm. With almost half of the participants (47%) selecting that they liked that firm management was available to meet with and discuss their needs underlines the importance of firm management understanding their employees. Check-ins with employees to assess their goals and aspirations should not be overlooked by managers and partners as these goals and aspirations evolve. This approach should be incorporated in both annual performance evaluations and as part of informal discussions throughout the year.

An employee's fit within the community can be strengthened by introducing new employees to others in the community that have similar interests, passions and hobbies. When employees discover external activities that have meaning to them, firm management should support those activities and the employee's involvement in the activities. Being able to do that requires firm management to get to know their employees and what the employees enjoy doing in the community. This may necessitate conversations with employees not previously held but if firm management understands there is empirical evidence supporting this step, perhaps it will be willing to make the step. Additionally, firm management should pay attention to why flexibility of hours and of work arrangement were rated so high, 76% and 70% respectively, by participants as aspects they like best of their firm. Flexibility allows employees to balance their priorities, both at the firm and in the community, and gives them the opportunities to explore links and fit outside of the firm. Participants appreciated the support of firm management to get involved in their community, with 34% picking that aspect they liked about their firm.

Sacrifice includes potential professional losses, such as job title, compensation, and benefits, and personal losses, such as loss of spouse's job, good school systems, and service to local organizations. This dimension is potentially the one the firm has equally more control and less control. Managers have control over job title, compensation, and benefits. Offering employees compensation and benefits that is at market or higher is one step to make it harder to leave the firm. The personal losses the employee might suffer from leaving the firm are harder for the managers and partners to control. However, taking steps to increase and strengthening the links and fit employees have with both the firm and the community could make the sacrifice of leaving the firm and possibly the community greater.

As mentioned before, compensation and benefits are always going to be a part of the retention conversation in public accounting. The participants of this study gave weight to that part of the conversation with compensation and benefits being the 4th top aspect participants liked best. The study did not empirically look at compensation and benefits as a variable but 64% of participants indicated that it was a feature they liked best so perhaps firm management should start or continue to make compensation and benefits a priority. Autonomy and variety in projects and tasks were the top 5th and 6th aspects participants liked about their firm. Work-life balance was picked by over half of the participants (57%).

Theoretical Implications

This study contributes new knowledge to the size of organization, job embeddedness, job engagement, and turnover intention literature. First, the size of public accounting firms has not previously been studied in relation to the variables of turnover intentions, job embeddedness, and job engagement. Prior research on turnover intentions in public accounting has primarily been within the context of accountants at large public accounting firms (Herda & Lavelle, 2012; Parker & Kohlmeyer, 2005; Pasewark & Strawser, 1996; Pasewark & Viator, 2006; Stallworth, 2003). Other studies focused within a geographic area (Parker & Kohlmeyer, 2005) while others used the AICPA's member list to mine for survey participants (Pasewark & Viator, 2006; Stallworth, 2003). This study answers the call of Saridakis et al. (2013) for future studies to look at job embeddedness and the level of this construct within small and large firms. The results of the current study suggest that as a firm gets bigger, a full-time accounting professional's level of job embeddedness increases. Hall et al. (2005) reviewed prior literature on the dimension of affective professional commitment (APC), its antecedents, correlates, and consequences, in the different work environments of public accounting and industry, specifically the impact work arrangements have on affective professional commitment. Hall et al. (2005) suggested future research could add to the turnover intention literature by examining commitment in different work arrangements. While this study did not have commitment as a focal variable, it does analyze job embeddedness and job engagement, constructs in which giving employees a say in their work arrangements could increase levels of job embeddedness and job engagement. Prior studies have shown that employees who have a say in their work environment and work arrangements are more engaged (Bakker & Demerouti, 2014; Christian et al., 2001; Wrzensniewski & Dutton, 2001). As shown in the supplemental question that asked employees to pick those aspects of their firm they liked best, flexibility of work arrangement was selected by 70% of the participants. The results of this study did not show a predictive ability of size on job engagement, but based on prior research on engagement and the supplemental responses from participants in the survey, additional exploratory studies on size and job engagement are warranted.

In 2020, Nouri and Parker (2020) conducted a literature review in which they summarized prior turnover research in public accounting research and provided guidance for future research. They called for studies to examine job embeddedness in the context of the accounting profession. Bakker and Albrecht (2018) examined different trends in research on job engagement and encouraged future research to examine job engagement in specific industries and occupations. This study answers both calls by investigating job embeddedness and job engagement of full-time accounting professionals at public accounting firms. As mentioned, research on turnover intentions in the accounting profession is prolific. The current study extends the stream of turnover intentions research by examining additional antecedents: job embeddedness and job engagement.

Limitations and Future Research

The findings of this study point to several areas of future research. The study did not present results that supported the hypothesis that size of a public accounting firm predicted levels of job engagement. The question used in the survey instrument to assess the size of the firm was an open-ended question that asked the participants to estimate the number of full-time accounting professionals in their office. Other methods of assessing size of firm, such as firm revenues, might provide a better estimate of firm size. Additionally, the impact of size could be studied within the context of decentralized or centralized firms. Pursuing the question of size from the lens of how and with whom firm decisions are made may provide better insights on the impact of size on job embeddedness and job engagement.

Contrary to current research, this study did not show that job engagement predicted the employee’s desire to stay with the firm. Schaufeli et al.’s (2002) definition of engagement was used in this study and incorporated the UWES-9 instrument to assess job engagement of the participants. This questionnaire was designed by Schaufeli et al. (2002) and included the three dimensions of job engagement: vigor, dedication, and absorption. Future research could take different approaches to better understand the impact of job engagement on public accounting employee’s desire to stay with their firms. A composite score of the nine-question survey instrument was used. Future research could examine whether the three separate dimensions of job engagement have different impacts on turnover intentions. Perhaps, due to the nature of busy season, a full-time accounting professional’s level of vigor and energy does not have a predictive relationship with their desire to stay with their firm, while their level of dedication and absorption might significantly predict their desire to stay with their firm.

This study did not analyze any moderating or mediating effects of the variables. There are several moderation and mediation models that should be used in future research. If job engagement does not predict turnover intentions, perhaps it affects the relationship between job embeddedness and turnover intentions. Future research should investigate whether the size of public accounting firm moderates the relationship between job embeddedness and turnover intentions and the relationship between job engagement and turnover intentions. A replication of the current study could be conducted but use the separate six dimensions of job embeddedness and the separate three dimensions of job engagement to investigate the relationships between size, job embeddedness, job engagement, and turnover intentions. A moderation/mediation analysis could be conducted when studying the separate dimensions of job embeddedness and job engagement.

Of my participants, 50.7% were partners of their firm, which could be a bias. Of those participants who were partners, 71% were from small firms (20 employees or less) and 29% were from large firms (21 employees or more). One would think that partners are the ones who create and steer the firm culture, introducing or adapting strategies that could increase an employee's level of job embeddedness and job engagement. However, this could be different depending on the size of the firm. In a small firm with 20 employees are less, the partners are the ones implementing strategies. They do not have work with a national office that creates and pushes out the policies to the individual offices to implement. Partners of a small firm are often the ones who started the firm, establishing a culture and environment they desired. Partners in an office of a national firm or Big 4 international firm may not have a role in the human resource policies created by the national office. Future research could replicate this study but exclude partners from the analysis. Additionally, future research could look at the differences in job embeddedness and job engagement between the different positions in a public accounting firm.

The survey was distributed using different channels and the strategy of distribution focused on obtaining participation from firms of all sizes and from all service lines. Future research could use a more targeted approach with a focus on firms of a specific size, i.e., following the small, medium, and large size categories used by the AICPA. Analyzing job embeddedness, job engagement, and turnover intentions by service line should be done as each of these service lines have different types of projects, different deadlines, and different difficulties. The study did not ask the participants where they lived or if they lived in suburban or rural areas. Thus, there was no information to identify possible impacts of location on the variables of interest. Investigating whether job embeddedness and job engagement differ in suburban or rural areas would give additional depth to these constructs. Perhaps employees in rural areas tend to have higher levels of job embeddedness due to the nature of a smaller community. Conversely, employees in suburban areas might experience higher levels of job engagement due to the diversity of the client base. Additionally, this study focused on turnover intentions in public accounting. Retention is also an issue for accountants practicing in industry. Two approaches using the variables of this study could be made with accountants in industry. One, this study could be replicated with a focus on accountants in industry and how their embeddedness and engagement could influence their desire to stay with their company. Two, an analysis could be conducted to examine the differences between the levels of job embeddedness and job engagement with accountants in practice and with those in industry.

The number of participants did not allow for the use of structural equation modeling analysis. However, the significant relationships found between the variables warrant future study with a larger sample size. A larger sample size would allow for the use of structural equation modeling analysis to be used to test the model. Future research could benefit from structural equation modeling (SEM), in which a more comprehensive model of full-time accounting professionals' intentions to stay with their firm could be developed.

Summary

The study began to explore how the size of a public accounting firm can influence employees' job embeddedness and job engagement. Public accounting firms are commonly characterized as small, local, regional, national, or Big 4 identifiers by those who have worked or currently work in public accounting. My findings suggest a moderate predictor ability of the size of firm on job embeddedness, though not in the predicted direction. More work should be explored to see how size influences an employee's sense of being embedded in the firm and their community. Most importantly, findings of this study add to the current literature and the practical implications of job embeddedness on turnover intentions in public accounting firms. Theoretically, the results are the first to provide evidence that the levels of job embeddedness for employees in public accounting firms predict their desire to stay with their firm. Practically, this provides public accounting firm management better guidance on the intentionality of their human resource management practices. With this knowledge, they can create/change/adjust their HRM practices with the intent of strengthening their employees' links, fit, and sacrifice their firm and their community.

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APPENDIX A. SURVEY INSTRUMENT

Demographics

1. Age
2. Gender
    a. Man
    b. Woman
    c. Non-binary
    d. None of the above, please specify
    e. Prefer not to share
3. How many full-time client service professionals are in your office (estimate)?
4. How many offices are in your firm (estimate)?
5. Organization position (0 = staff; 1 = senior; 2 = manager; 3 = senior manager/director; 4 = partner/principal)?
6. Length of time working as a professional in an accounting firm?
7. How many public accounting firms have you worked for, including your current firm?
8. Length of time working at current firm?
9. Year graduated from highest level of education?
10. What credentials or designations do you hold? Check all that apply.
    a. CPA
    b. JD
    c. EA
    d. Other
    e. None

Survey Questions

Job Embeddedness (1 = strongly disagree, 7 = strongly agree)

1. My job utilizes my skills and talents well.
2. I feel like I am a good match for this firm.
3. I have a lot of freedom on this job to pursue my goals.
4. If I stay with my firm, I will be able to achieve most of my goals.
5. I would sacrifice a lot if I left this job.
6. The prospects for continuing employment with this firm are excellent.
7. I work closely with my co-workers.
8. I am a member of an effective work group.
9. On the job, I interact frequently with my work group members.
10. The place where I live is a good match for me.
11. I really love the place where I live.
12. The area where I live offers the leisure activities that I like (e.g., sports, outdoors, cultural, arts).
13. Leaving this community where I live would be very hard.
14. If I were to leave the area where I live, I would miss my neighborhood.
15. If I were to leave the community, I would miss my non-work friends.
16. I participate in cultural and recreational activities in my local area.
17. I am active in one or more community organizations.

18. My family roots are in this community.

Job Engagement (1= never, 7 = always)

1. At my work, I feel bursting with energy.
2. At my job, I feel strong and vigorous.
3. When I get up in the morning, I feel like going to work.
4. I am enthusiastic about my job.
5. I am proud of the work that I do.
6. My job inspires me.
7. I am immersed in my work.
8. I get carried away when I'm working.
9. I feel happy when I am working intensely.

Turnover Intentions (1 = strongly disagree, 7 = strongly agree)

1. Barring any unforeseen circumstances, I intend to stay with my current firm.
2. I plan to remain with my current firm for at least a few years.
3. For the foreseeable future, I plan to stay with my current firm.

Commitment (1 = strongly disagree, 7 = strongly agree)

1. I talk up this firm to my friends as a great firm to work for.
2. I would accept almost any type of job assignment in order to keep working for this firm.
3. I am extremely glad that I chose this firm to work for over others that I was considering at the time I joined.
4. I find my values and the firm's values are very similar.
5. This firm really inspires the very best in me in the way of job performance.
6. I am willing to put a great deal of effort beyond that normally expected in order to help this firm be successful.
7. I really care about the fate of this firm.

Job Alternatives (1 = not likely, 7 = very likely)

1. What is the probability that you can find an acceptable alternative to your job?
2. If you search for an alternative job within a year, what are the chances you can find an acceptable job?

Job satisfaction (1 = strongly disagree, 7 = strongly agree)

1. All things considered, I am extremely satisfied with my current assignments and responsibilities.
2. Knowing what I know now, if I had to decide all over again whether to pursue this type of work, I would certainly do it.
3. If a good friend of mine told me that he/she was interested in a job like mine (with my employer), I would recommend it.
4. My current work compares very well to my ideal job.
5. My current assignments and responsibilities measure up very well to the sort of job I wanted when I chose this career.

6. In general, I like my work very much.

What aspects of your firm do you like best? Please pick all that apply.

- Flexibility of hours
- Flexibility of work arrangement (office, from home, hybrid)
- Work-life balance
- Childcare options
- Compensation and benefits
- Variety in projects and types of clients
- Availability of managers and partners to meet with and discuss your needs
- Support from managers and partners to get involved in your community
- Learning and development opportunities
- Performance appraisal and feedback procedures
- Autonomy to work on your projects and tasks
- Respectful relationships with your colleagues and your clients
- Other (please list)